Spray-Lock Total20
20-Year Limited System Warranty

TOTAL 20 system™

Project #

PROECT INFORMATION

Project Name:				
Address:		**City:**	**State:**	**Zip:**
Phone:	**Ext:**	**Fax:**	**Email:**	
SCP Applicator:				
Address:		**City:**	**State:**	**Zip:**
Phone:	**Ext:**	**Fax:**	**Email:**	
Flooring Contractor:				
Address:		**City:**	**State:**	**Zip:**
Phone:	**Ext:**	**Fax:**	**Email:**	
SCP Product Applied:		**SCP Lot Number(s):**		
Ft.² of Applied SCP:	**SCP Bucket Qty:**			
Spray-Lock Brand / OEM Adhesive(s):		**Adhesive Lot Number(s):**		
Qty. of Adhesive: ☐ Cases ☐ Cans				
Flooring Product(s) (Mfr. / Product Name):		**Flooring Lot Number(s):**		
Installed Flooring Qty: ☐ Sq. Ft. ☐ Sq. Yds. ☐ Ea.				
Where there any areas where SCP / Spray-Lock Adhesives were not used? ☐ Yes ☐ No (If yes, please explain below)				
Date of SCP Application Completion:		**Date of Flooring Installation Completion:**		
SCP Invoice #		**Spray-Lock Adhesives Invoice #**		
SCP / Spray-Lock Adhesives Invoices Paid In Full? ☐ Yes ☐ No				
SCP / Spray-Lock, Inc. Warranty Period:				

Spray-LockTotal20

SCP 327/327 LP 20-Year System Warranty

Rev. Release 9/26/18

Spray-Lock Total20 Warranty

Spray-Lock Concrete Protection (SCP) will warrant against SCP material defects for a period of five (5) years from manufacturing date provided it was stored according to guidelines on product packaging. In addition, SCP will warrant installed systems against separating from the concrete substrate due to water migration through the concrete in the specific area(s) where SCP product was applied for a period of twenty (20) years from the SCP concrete treatment application date. This warranty is void if SCP's application instructions or any other technical information stipulated in SCP's documentation were not strictly followed.

This limited warranty covers against failures due to concrete water and subsurface water transmissions through the parent concrete, but not from topical surface intrusion, transfer and/or migration from an untreated external source such as flooding, or seepage through concrete via joints, walls and wall joints below grade, structural cracks, and/or other contiguous untreated areas of the facility.

BY THIS LIMITED WARRANTY, SCP AGREES THAT SHOULD THE SCP TREATMENT FAIL DUE TO WATER MIGRATION OR ALKALINITY (UP TO pH 14); SCP WILL REPAIR AND/OR REPLACE, AT ITS EXPENSE INCLUDING DIRECT LABOR AND MATERIALS AFFECTED IN THE SCP TREATMENT AREA, THE SCP TREATMENT AND THE FOLLOWING:

1) COATINGS AND COVERING SYSTEMS, FLOORING SYSTEMS, AND ROOFING SYSTEMS. HOWEVER, IN NO EVENT SHALL SCP PAY MORE, ON A SQUARE FOOT BASIS FOR THE REPLACEMENT OF THE FLOOR COVERING SYSTEM THAN THE ORIGINAL COST OF THE SYSTEM THAT IS BEING REPLACED. PROOF OF COSTS INCURRED FOR REPAIRS MUST BE PROVIDED TO SCP.
2) THIS APPLIES ONLY TO THE INSTALLED SYSTEM AS ORIGINALLY APPLIED AND ONLY TO THAT PORTION OF THE SYSTEM WHICH IS AFFECTED BY THE DEFECT. SCP WILL NOT BE RESPONSIBLE FOR THE REPLACEMENT OF ANY PORTION OF THE INSTALLATION THAT IS NOT DEFECTIVE, REGARDLESS OF WHETHER SUCH NON-DEFECTIVE PORTIONS ARE REPLACED FOR COSMETIC OR OTHER SUCH REASONS.

This limited warranty is further subject to the following conditions:

1. SCP products must be applied according to SCP application specifications on structurally sound and clean areas in which the concrete is fit-for-purpose for application and meets acceptable industry standards as defined in the current editions of ACI 318 and 201. If the areas to which the products are applied now or in the future fail to meet these requirements, the limited warranty shall be void.
2. The limited warranty shall be void if a cohesive substrate failure at the concrete surface occurs resulting in an installed system failure, the concrete surface has been treated with any kind of waterproofing, penetrating, and/or topical surface sealer or curing compound prior to SCP product application, and/or has alkali-aggregate reaction (AAR) conditions causing failure, surface scaling, and/or bond-inhibiting contaminants are present. Cracks and joints are not covered by this limited warranty.
3. The limited warranty shall be void if substrate concrete is determined, through independent forensic examination, to have not met the project specifications or engineer-approved mix design in any required constituent percentage within the tolerances allowed by ASTM C94 (for ready mixed concrete) or applicable ASTM/PCI for precast concrete.
4. The limited warranty shall be void if SCP products have been improperly applied by the applicator.
5. This limited warranty shall be void if the account is not paid in full by 60 days from the date of purchase. For special considerations that prove to be necessary on large projects or any other requested accommodations documentation must be on-file with SCP Customer Service.

Subject to all the conditions described herein, provided that SCP product has been made available and installed according to SCP guidelines, SCP will be responsible for reinstatement of the systems as listed above, which results from a breach of this limited warranty caused by a defect as described herein. The account related to this limited warranty must be paid in full prior to the limited warranty being effective. Any claim under this warranty must be first presented in writing to SCP. Any action in regard hereto or arising out of the terms and conditions hereof shall be instituted and litigated in the courts of the state of Tennessee in Hamilton County, Tennessee or any federal court sitting therein and no other. In accordance herewith, the parties hereby submit to the jurisdiction and venue of such courts and waive any objection that such courts are an inconvenient forum. The parties hereby waive the right to a jury trial in any action, proceeding or counterclaim arising out of or related to this limited warranty.

The recipient of the limited warranty must provide SCP a written notice within thirty (30) days after the discovery of a breach of this limited warranty in order to assert its right to any repairs covered by this limited warranty. Claims shall be addressed to: 5959 Shallowford Road, Suite 405, Chattanooga, TN 37421, Attn: Technical Director.

Spray-Lock Total20
20-Year Limited System Warranty

Claims must be submitted within fifteen(15) days of the discovery of the potential breach of this Warranty.

Replaces all previous versions. Rev REL 10/1/18

Spray-Lock Total20 Warranty

Subject to the conditions and limitations stated below, SPRAY-LOCK, INC.® ("Spray-Lock") warrants that Spray-Lock® Standard Flooring Adhesive (Product) will be free from Manufacturing Defects and will not break down, deteriorate or delaminate due to adhesive bond failure under normal usage for a period of twenty (20) years when applied as specified in Spray-Lock's most current printed literature, installation guidelines, instructions and any other technical information (which can be found at www.spraylock.com) PROVIDED that the concrete substrate upon which the adhesive is applied has been treated with Spray-Lock Concrete Protection (SCP) as specified in SCP's most current printed literature, installation guidelines, instructions and any other technical information (which can be found at www.concreteprotection.com).

Disclaimer

THIS LIMITED WARRANTY IS GIVEN IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES BASED ON SAMPLES OR ORAL STATEMENTS, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS DOCUMENT. IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE OR LOSS IS SPECIFICALLY EXCLUDED AT ALL TIMES. THERE ARE NO WARRANTIES BEYOND THIS EXPRESS WARRANTY. SPRAY-LOCK EXCLUDES ANY LIABILITY FOR LOST PROFITS OR ANY OTHER INDIRECT SPECIAL OR CONSEQUENTIAL DAMAGES. THE REMEDIES CONTAINED HEREIN ARE THE ONLY REMEDIES AVAILABLE FOR BREACH OF THIS WARRANTY.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied Warranty lasts, so the above limitations or exclusions may not apply to you. These limited warranties give you specific legal rights and you may also have other rights, which vary from state to state. Except for these other rights, the remedies provided in the above warranties state the limit of Spray-Lock's responsibility. No representative, employee, or agent of Spray-Lock is authorized to modify or change the limited warranties as stated herein. Spray-Lock excludes and will not pay consequential or incidental damages under these limited warranties. By this we mean that Spray-Lock will not cover or pay for any loss, expense, or damage other than to the floor covering itself that may result from a defect in the adhesive. Some examples of consequential or incidental damages are: replacement of the substrate, trim moldings, disconnecting/reconnecting appliances or fixtures, or moving of furniture. If the adhesive was installed in a commercial application, this means that Spray-Lock will not cover or pay for any loss, expense, damage, or loss of profit arising from inability to use the premises because of defect in the adhesive. This warranty: (a) shall commence on the date of the flooring installation's substantial completion and shall end as specified in this warranty; (b) is limited to the original purchaser and is nontransferable; and (c) applies only to purchases and installations of the Product within the United States.

Exclusions

This Warranty shall not cover installations that do not meet common & customary structural and industry standards of substrate preparation for flooring application. If the areas to which the products are applied now or in the future fail to meet these standards, this Warranty shall be void. Spray-Lock shall not be responsible for delamination which results from the failure of any other component of the installation.

Spray-Lock shall NOT be responsible for delamination due to any of the following:

(a) Structural failure, seismic action, dimensional instability of floor covering material, discoloration, caustic solutions entering the system topically through the joints, voids; AND/OR
(b) Failure caused by the use of incompatible curing compounds, mold release agents, non-Portland cement based leveling or patching compounds of any kind (unless specifically approved in writing by Spray-Lock); AND/OR
(c) The area of installation is subject to water damage, flooding or immersion in water due to any cause, such as plumbing failures or roof leaks; AND/OR
(d) Product was allowed to freeze prior to use; AND/OR
(f) Use of Spray-Lock's adhesives that appear to be defective as defined: irregular consistency (coagulated clumps or stringiness) color not matching description on Technical Data Sheet, or content of can feeling solid when shaken; AND/OR
(g) Improper preparation or installation or maintenance procedures, and any other condition beyond the control of Spray-Lock; AND/OR
(h) Failure caused by the use of oil or wax-based floor sweeping compounds; AND/OR
(i) Failure caused by the use of flooring strippers (especially those containing benzyl alcohol); AND/OR
(j) Failure caused by the use of asbestos abatement chemicals.

Replaces all previous versions. Rev REL 10/1/18

Spray-Lock Total20 Warranty

Workmanship
While Spray-Lock provides information and training as to the use of the Product to installers, Spray-Lock does not warrant the installer's workmanship. Workmanship errors, like poor floor preparation or poor material installation, should be addressed to the contractor who installed the surface. Installer/Applicator must perform installation with skilled, experienced and trained workmen supervised by properly trained personnel who have demonstrated expertise in installations of similar size and scope. Spray-Lock does not cover losses which result from the use of the Product if the Installer or contractor knew or should have known that the Product suffered from a manufacturer's defect and was not suitable for use. Spray-Lock does not have an employee or contractual relationship with contractors and does not supervise, direct or in any other way control the performance of the contractors or subcontractors used during installation.

Shelf Life
The Product may be stored for a period of up to 3 years from date of manufacture prior to use. During that time, the Product is warranted to be free from material defects when handled, stored, and transported as specified by Spray-Lock.

Notice: Product should be stored at a minimum of 50°F and a maximum of 120°F at all times. Product should not be exposed to freezing temperatures. Adhesive must be maintained at a minimum temperature of 68°F for a period of 24 hours prior to use. Allowing the Product to freeze will void this Warranty. Please see the complete Product information for details on storing and handling the Product prior to use.

Filing A Claim
To file a claim under this warranty, you must contact us, in writing, within fifteen (15) calendar days of the discovery of the alleged manufacturing defect in our Product, at Spray-Lock, Inc, Attn: Technical Services, 5959 Shallowford Road, Suite 405, Chattanooga, TN 37421. Proof of purchase must be submitted with any notice of claim. Spray-Lock reserves the right, without any obligation, to physically inspect, perform testing, and obtain samples at the site where the warranty claim occurred, or to engage an independent third party for those services before we determine the validity of your claim. In order to perform (or have performed) the services described in the prior sentence, the owner of the site consents to total access for such services and agrees to pay for those services and all related costs of Spray-Lock if the claim is invalid under this warranty. Your claim must be received and evaluated by us before any repair work is performed; otherwise, this warranty will be null and void. Initiating repairs and/or replacements of affected areas prior to notice and access of the area to Spray-Lock shall void the warranty, and the Customer shall not be reimbursed for repairs.

Exclusive Remedy
Spray-Lock will, at its option and expense, for each Product warranty claim that it determines to be valid, provide for the reasonable costs of labor and materials to replace or repair the affected area(s) only. Spray-Lock will not pay for replacement of materials in areas that are not proven to be defective. Spray-Lock reserves the exclusive right to determine which areas are classified as defective. Spray-Lock will not pay more, calculated on a square-foot basis, for the repair or replacement of the affected area(s) than was paid in the original purchase price for material, glue, and installation. The duration of the warranty on any replacement Product will not exceed the balance of the warranty remaining on the Product that was replaced as of the date of such replacement.

NOTE TO SPECIFIER: 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 (i.e., deleting, adding, or modifying text) as required to suit project requirements.

The design professional and the contracting parties of the Contract Documents are responsible for the accuracy of issued project specifications, including use of this SCP™ Guide Specification.

Contact SCP™ for instructions for other applications not included in this specification.

SCP™ (SPRAY-LOCK CONCRETE PROTECTION™) SHALL NOT BE LIABLE FOR DAMAGES ARISING OUT OF THE USE OF THIS GUIDE.

CSI 3-PART LONG-FORM GUIDE SPECIFICATION

EDIT TO SUIT PROJECT REQUIREMENTS

SPRAY-LOCK TOTAL20
PENETRATING COLLOIDAL SILICA CONCRETE TREATMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes SCP™ spray-applied, penetrating, colloidal silica concrete treatments and substrate protection, applied after finishing.

NOTE TO SPECIFIER: SCP™ products are based on colloidal technology that penetrates into concrete capillaries and pores. SCP™ Technology then reacts with free alkali (i.e. – Na^{+}, K^{+}, and Ca^{++}) to form an insoluble gel within the capillaries and pores of the concrete, providing a waterproof seal, but uniquely leaving the concrete surface in a condition to receive adhesives, toppings, other finish systems, and/or coatings.

B. Related Requirements: Examine Contract Documents for requirements that directly affect or are affected by Work of this Section. Documents and Sections include, but are not limited to, the following:
   1. Drawings and General Provisions of the Contract
   2. General and Supplementary Conditions
   3. Division 01 General Requirements
   4. Section 03 30 00 Cast-in-Place Concrete for concrete materials, mixes, and placement of general building applications of concrete.
   5. Section 09 65 80 Spray-Applied Floor Adhesives for floor adhesives sprayed on concrete slabs treated with SCP™ penetrating colloidal silica concrete treatment.
   6. Section 32 13 13 Concrete Paving for concrete material, mixes, and placement of concrete pavement and walks.

NOTE TO SPECIFIER: Coordinate application sections between concrete, SCP™, adhesive systems, subfloor-substrate finish coatings, and floor-finish coverings.

1.2 REFERENCES

A. Reference Standards: Refer to Section 01 42 00 References and the following:
   1. American Association of State Highway and Transportation Officials (AASHTO)
      a. AASHTO TP 95 - Standard Method of Test for Surface Resistivity Indication of Concrete's Ability to Resist Chloride Ion Penetration
   2. American Concrete Institute (ACI):
      a. ACI 211 – Standard Recommended Practice for Selecting Proportions for Concrete
      b. ACI 300 Series (Design & Construction Practices)
      c. ACI 500 Series (Special Products & Processes)
   3. ASTM International (ASTM)
      a. ASTM C39/C39M – Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
      b. ASTM C157/C157M – Standard Test Method for Length Change of Hardened Hydraulic-Cement Mortar and Concrete
      c. ASTM C666 / C666M – Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing
      d. ASTM C876 – Standard Test Method for Corrosion Potentials of Uncoated Reinforcing Steel in Concrete
      e. ASTM C1543 – Standard Test Method for Determining the Penetration of Chloride Ion into Concrete by Ponding
      f. ASTM C1583/C1583M – Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)
      g. ASTM E96/E96M – Standard Test Methods for Water Vapor Transmission of Materials
      h. ASTM E329 – Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
      i. ASTM E699 – Standard Criteria for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating Building Components in Accordance with Test Methods Promulgated by ASTM Committee E-6
      j. ASTM C779/C779M - Standard Test Method for Abrasion Resistance of Horizontal Concrete Surfaces
   4. British Standards Institute (BS)
      a. BS EN 13295 – Products and systems for the protection and repair of concrete structures.Test methods. Determination of resistance to carbonation
      b. BS EN 12390-8 – Testing hardened concrete. Depth of penetration of water under pressure
   5. ISO/IEC: International Organization for Standardization/ International Electrotechnical Commission
      a. ISO 5470-1 – Rubber- or plastics-coated fabrics — Determination of abrasion resistance — Part 1: Taber abrader
      b. ISO/IEC 17025 – General requirements for the competence of testing and calibration laboratories

6. Nordic Council of Ministers (NORDTEST)
   a. NORDTEST Method NT BUILD 492 – Concrete, Mortar and Cement-Based Repair Materials: Chloride Migration Coefficient from Non-Steady-State Migration Experiments
7. USGBC "Leadership in Energy and Environmental Design (LEED)

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference according to Division 01. Review requirements for preparation and application.

1.4 SUBMITTALS

A. Submittals: Comply with requirements of Section 01 33 00 Submittal Procedures.

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. Sustainable Design Submittals:
   1. Laboratory Test Reports: For SCP™ penetrating colloidal silica concrete treatment, indicating compliance with low-emitting material requirements.
   2. For wet-applied products, submit volume used.

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

D. Quality Assurance Submittals: Certificates, and Test and Evaluation Reports.

E. Field quality-control reports.

F. Sample Warranty: For special warranty

G. Closeout Submittals:
   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. Record Documents: Comply with requirements of Section 01 78 39 Project Record Documents.

1.5 QUALITY ASSURANCE

A. Material Requirements: Concrete mixes shall be designed according to ACI 211.

B. Structural Requirements: Concrete shall be “fit for use” per the applicable Guides, Manuals, Specifications, and/or Standards of the following ACI Manual of Concrete Practice series:
   1. ACI 300 Series (Design & Construction Practices)
   2. ACI 500 Series (Special Products & Processes)

C. Manufacturer Qualifications: ISO 9001 Certified Manufacturer with a minimum 5 years' experience and capable of providing field service representation;

D. Applicator Qualifications: Flooring Contractor and their field personnel shall be trained and approved by Spray-Lock for proper installation of the Spray-Lock Concrete Protection products and Spray-Lock adhesives. In addition, Spray-Lock will test and approve the flooring material for bond warranty.

E. Testing Agency Qualifications: An independent agency qualified according to ISO/IEC Standard 17025 or ASTM E699 and ASTM E329.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery, storage, and handling shall be according to the manufacturer's written recommendations, industry guidelines, and/or Division 01 requirements whichever is more stringent.

1.7 FIELD CONDITIONS

A. Environmental Requirements per manufacturer's written recommendations, Division 01, and as follows:
   1. Allow surfaces to attain a temperature of 36 deg F (2 deg C) and rising before proceeding with product application.
   2. Product should not be allowed to freeze.
   3. Protect application surfaces during periods of exposure to high winds.
   4. Ensure that frost or frozen surfaces are thawed with no standing water.
   5. Surfaces over 90 deg F and Direct Sunlight Conditions: Apply a fine mist spray of water on the surface before the application of SCP™ treatment to help alleviate premature chemical reaction and/or drying from taking place prior to achieving maximum penetration.

1.8 WARRANTY

A. Manufacturer's Special Warranty: Manufacturer agrees to repair or replace SCP™ penetrating colloidal silica concrete treatment that fails in materials within specified warranty period.
   1. Warranty Period: 20 years from date of Substantial Completion.

   This limited warranty covers against failures due to water and water vapor transmissions through the treated concrete component. Please see Spray-Lock Concrete Protection SCP 327/ 327 LP 20-Year System Warranty for additional information.

PART 2 - PRODUCTS

2.1 Description

A. SCP™ Spray-Applied Penetrating Colloidal Silica Concrete Treatment Performance: SCP spray-applied colloidal silica penetrates into the available concrete capillaries and voids left behind from bleed water. Once in the concrete, SCP products react with the available alkalis to primarily form additional Calcium Silicate Hydrate (C-S-H). This

additional C-S-H fills the capillaries and shuts down liquid water transmission giving you better performing concrete that allos flooring installs to begin in as little as 14 days.

2.2 PERFORMANCE REQUIREMENTS

NOTE TO SPECIFIER: Retain or revise paragraph and subparagraphs below for LEED requirements.

A. Low-Emitting Materials:
   1. General Emissions Evaluation: Building products shall be tested and determined compliant according to California Department of Public Health (CDPH) Standard Method v1.1–2010, using the applicable exposure scenario.
   2. Adhesives and sealants wet-applied on site shall meet applicable chemical-content requirements of SCAQMD Rule 1168, July 1, 2005, Adhesive and Sealant Applications, as analyzed by the methods specified in Rule 1168. Provisions of SCAQMD Rule 1168 do not apply to adhesives and sealants subject to state or federal consumer product VOC regulations.

2.3 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide spray-applied products by the following:
   1. Spray-Lock Concrete Protection, LLC, 5959 Shallowford Road, Suite 405, Chattanooga, TN 37421; (office) 423.305.6151 / (fax) 423.305.6150; www.concreteprotection.com
   2. Substitution Limitations: Manufacturers of equivalent products beyond those listed above shall be considered when submitted per Division 01, using CSI Substitution Request Form 1.5C (During the Bidding Phase) or Form 13.1 (After the Bidding Phase). Project Engineer/Manager shall assess the equivalency of the submitted product(s).

B. Source Limitations: Obtain SCP™ penetrating colloidal silica concrete treatment through one source from a single manufacturer.

NOTE TO SPECIFIER: SCP™ will analyze the concrete mix design for product selection. SCP™ will need to have the mix design, specific gravities of the constituents, and individual aggregate gradations. These factors contribute to the permeability of the concrete. Mixes with low permeability require products formulated to penetrate this type concrete.

2.4 PENETRATING COLLOIDAL SILICA CONCRETE TREATMENT FOR NEW CONCRETE

A. Product: Spray-Lock Concrete Protection, LLC; SCP™ 327/ 327LP – Time of Placement is a green-tinted (dries clear), odorless, non-toxic, and non-flammable penetrant in a colloidal liquid base. SCP™ 327/ 327 LP penetrates concrete substrates to chemically react with free alkali components in the concrete resulting in:
   1. Superior cure at time of placement

2. A surface ready to accept adhesives, coatings, and/or underlayments when applied according to the respective manufacturer's recommendations
3. Reduced drying shrinkage and curling/warping of the concrete section.
4. Minimizes scaling and spalling
5. Enhanced durability
6. Waterproofing benefit
7. Flooring and coating systems can be applied as soon as 14 days after application

B. Product Requirements: SCP™ penetrating colloidal silica concrete treatments shall conform to the information provided in the most current product data sheet supplied by Spray-Lock Concrete Protection or product manufacturer approved by the Project Engineer/Manager.

2.5 ACCESSORIES

A. Large Surface Areas and/or Volumes: Low-pressure, high-volume sprayer less than 100 psi (0.69 MPa), or medium-pressure airless sprayer less than 500 psi (3.4 MPa).

B. Small to Medium Surface Areas and/or Volumes: Pump or backpack sprayer for areas under 1000 sq ft (9.3 sq m), or sprayers indicated for large surface areas above.

PART 3 - EXECUTION

3.1 PREPARATION

A. Prepare according to SCP™'s written instructions, industry guidelines, Division 01, and as follows:
1. Prepare substrates to ensure proper application of SCP™ treatment.
   a. Protect in-place assets from overspray.
   b. NEW CONCRETE: As soon after concrete placement, floating, and/or troweling, so that it is hard enough for foot traffic or other surface loading without causing damage to the surface.
      1) Concrete shall not be treated with any other curing system including internal or externally applied, i.e., ASTM C309 membranes or cure and seal products.
      2) Concrete shall not be treated with sealers or densifiers, including silicate sealers, i.e., sodium, potassium, lithium, etc.
      3) Remove standing water.
      4) Do not burnish the surface or close pores, by over finishing with trowels.

3.2 APPLICATION

A. For horizontal applications, apply according to SCP™'s written instructions, industry guidelines, Division 01, and as follows:
1. SCP™ Application to NEW CONCRETE:
   a. Apply SCP™ treatment as soon as the concrete is hard enough for foot traffic or other surface loading without damage to the surface. Maintain a flood coat for 15 minutes or apply at a rate of approximately 140 to 180

sq ft per gallon using low-pressure, high-volume sprayer less than 100 psi (0.69 MPa), or medium-pressure airless sprayer less than 500 psi (3.4 MPa).

b. If necessary, spray a second application of SCP™ for porous concrete at a rate of approximately 140 to 180 sq ft per gallon.

c. After 14 days, apply leveling cements, acrylic primers, applicable Spray-Lock™ adhesive, and/or the final surface finish materials according to the respective manufacturer recommendations.

B. For vertical and inverted applications, apply according to SCP™'s written instructions, industry guidelines, Division 01, and as follows:

1. SCP™ Application to NEW CONCRETE:

a. Apply SCP™ treatment as soon as the concrete formwork is removed. Use a low-pressure, high-volume sprayer less than 100 psi (0.69 MPa), or medium-pressure airless sprayer less than 500 psi (3.4 MPa), set to a pressure that will not damage the surface, i.e., approximately 20 to 500 psi (0.21 to 3.4 MPa). Apply at a rate of approximately 300 sq ft per gallon. The surface needs to be dampened while minimizing any run off the surface. This is achieved by using lower pressure and lower delivery rate spray tips and moving faster.

b. Continue applications at the above rate until surface starts to reject the product. This is evidenced by product rilling and starting to run down the surface.

c. After 14 days, or after manufacturer's testing protocol approves application, apply the final surface finish materials according to the respective manufacturer recommendations.

3.3 FIELD QUALITY CONTROL

A. Site Tests and Inspections per Division 01, and as follows:

1. Inspect applied SCP™ for non-conforming work including, but not limited to:

a. Dried SCP™ treatment material on the concrete substrate due to slab not being wetted during very hot, direct sunlight, and/or windy conditions.

3.4 CLEANING

A. Immediately clean overspray or splash off glass and metal with soap and water, and dry.

B. Waste Management per Division 01, and as follows:

1. Store and recycle shipping cartons and empty bucket containers.

3.5 PROTECTION

A. Protect concrete from staining, laitance, and contamination during remainder of construction period.

END OF SECTION

NOTE TO SPECIFIER: Be sure to obtain the latest version of this Guide Specification.

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The design professional and the contracting parties of the Contract Documents are responsible for the accuracy of issued project specifications, including use of this Guide Specification.

For information on Spray-Lock products, visit http://spraylock.com/adhesives. To find approved distributors, go to http://spraylock.com/distributors

SPRAY-LOCK, INC. SHALL NOT BE LIABLE FOR DAMAGES ARISING OUT OF THE USE OF THIS GUIDE SPECIFICATION

CSI 3-PART LONG-FORM GUIDE SPECIFICATION

EDIT TO SUIT PROJECT

SECTION 09 65 80

SPRAY-LOCK TOTAL20
SPRAY-APPLIED FLOOR ADHESIVE
FOR CONCRETE TREATED WITH SCP PRODUCTS AT TIME OF PLACEMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes spray-applied flooring adhesive.

B. Related Requirements: 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:

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

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 General Requirements, and Divisions 02 through 49 Specification Sections apply to this Section.

NOTE TO SPECIFIER: Include the following Section if concrete substrates are treated with Spray-Lock Concrete Protection for 20-year delamination warranty.

2. Section 03 05 59 Penetrating Colloidal Silica Concrete Treatments: For concrete substrates treated with penetrating colloidal silica concrete treatments.
3. 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.

4. Section 03 54 16, Hydraulic Cement Underlayment: For leveling of existing concrete slabs.
5. Section 06 10 00, Rough Carpentry: For proper wood-based panel underlayment required for an acceptable finish flooring system installation.
6. Section 06 16 00, Sheathing: For proper wood-based panel underlayment required for an acceptable finish flooring system installation.
7. Section 09 65 00, Resilient Flooring.
   a. Section 09 65 16, Resilient Sheet Flooring.
   b. Section 09 65 16.13, Linoleum Flooring.
   c. Section 09 65 19, Resilient Tile Flooring.
8. Section 09 68 00, Carpeting.
   a. Section 09 68 13, Tile Carpeting.
   b. Section 09 68 16, Sheet Carpeting.

1.2 DEFINITIONS

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

A. Abbreviations and Acronyms: Refer to Section 01 10 00, Summary, Section 01 42 00, References, and as follows:
   1. AHJ: Authority Having Jurisdiction from local, state and federal regulatory agencies.
   2. RH: Relative humidity.

B. Definitions: Refer to Section 01 10 00, Summary, Section 01 42 00, References, and as follows:
   1. Adhesive: A substance that unites or bonds surfaces together.
   2. Aerosol Adhesive: An 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. HAP: Hazardous Air Pollutant.
   5. LEED: Leadership in Energy and Environmental Design, a set of USGBC rating programs applicable to construction projects.
   6. VOC: Volatile Organic Compounds 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.

1.3 REFERENCE STANDARDS

NOTE TO SPECIFIER: Delete reference standards below that are not required.

A. Referenced Standards: Refer to Section 01 42 00, References, and as follows:
   1. ASTM. ASTM International; www.astm.org
      a. ASTM D907, Standard Terminology of Adhesives
      b. ASTM D5116, Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products
      c. ASTM E329, Standard Specification for Agencies Engaged in Construction Inspection and/or Testing
      d. ASTM E699, Standard Practice for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating of Building Components
      e. ASTM F710, Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
      f. ASTM F1482, Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring
      g. ASTM F1869, Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
      h. 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

1.4 ADMINISTRATIVE REQUIREMENTS

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

A. Coordination: Comply with Section 01 31 00, Project Management and Coordination, and as follows:
   1. Coordinate concrete slab or concrete topping finish according to Section 03 33 00, Cast-in-Place Concrete and Division 09 finish flooring requirements.

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

1.5 SUBMITTALS

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

A. Submittals: Comply with Section 01 30 00, Submittal Procedures.

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 according to specified test methods for each product and/or system indicating physical, chemical and performance characteristics.

E. Sustainable Design Submittals: Submit the following USGBC LEED submittals online according to Section 01 81 13, Sustainable Design Requirements:

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

NOTE TO SPECIFIER: Delete LEED rating system if not required.

a. LEED v4 ([BD&C] [ID&C]) EQ Credit (1-3 points), Low-Emitting Materials: At least 90 percent, by volume, for emissions; 100 percent for VOC content.

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

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

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

F. Closeout Submittals to be in accordance with Section 01 70 00, Execution and Closeout Requirements, 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 TO SPECIFIER: Delete LEED rating system not required.

4. Sustainable Design Closeout Documentation: Complete and maintain

online USGBC LEED worksheets for the following credits:
a. LEED v4 ([BD&C] [ID&C]) EQ Credit

1.6 QUALITY ASSURANCE

NOTE TO SPECIFIER: Retain Applicator qualification requirement to ensure proper substrate preparation for spray-applied floor adhesive.

A. Qualifications:
1. Applicator: Flooring Contractor and their field personnel shall be trained and approved by Spray-Lock for proper installation of the Spray-Lock Concrete Protection Products and Spray-Lock Adhesives. In addition, Spray-Lock will confirm compatibility of the flooring material for the bond warranty.

B. Source Limitations: Obtain spray-applied adhesive through one source from a single manufacturer, or a Spray-Lock approved distributor.

C. Sustainability Standards and Certifications:

NOTE TO SPECIFIER: Edit sustainability standards and certifications below to suit Project.

1. Adhesive and Sealant VOC Limits: According to Green Seal GS-36 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/cu m).

NOTE TO SPECIFIER: Benchmark mockup is recommended to test substrate preparation, workmanship, and compatibility between finish floor material and adhesive.

D. Benchmark Installations in accordance Section 01 40 00, Quality Requirements 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 on Drawings or directed by Architect.
2. Approved mockups shall become benchmarked installations and may be incorporated into the Work where accepted without exception by the Architect.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Delivery, Storage, and Handling: Comply with manufacturer’s recommendations, Section 01 60 00, Product Requirements, and as follows:
1. Delivery and Acceptance Requirements:
a. Deliver materials to Project site 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.
   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 to 80 deg F (18 to 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.

1.8 FIELD CONDITIONS

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

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

B. Ambient Conditions: Comply with manufacturer's written recommendations, Section 01 70 00, Execution and Closeout Requirements and as follows:
   1. New concrete slabs shall be flat, clean and dry, passing adhesion tests, and complying with manufacturer's written requirements.
   2. Environmental Limitations: Maintain temperature and ambient RH according to manufacturer's recommendations.
      a. Maintain space, substrate temperatures, and ambient RH for time prior to, during and after installation as recommended by spray-adhesive manufacturer.
   3. Acclimate floor finish materials into spaces they will be installed a minimum 48 hours in advance of installation.
      a. Do not install until floor finish materials are same temperature as space where they are to be installed.

1.9 WARRANTY

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

A. Provide executed warranties according to Section 01 70 00, Execution and Closeout Requirements. (Note: See Spray-Lock 20-Year System Warranty for detailed coverage information.)

B. Provide Spray-Lock Flooring Adhesive Manufacturer's:
   1. Material and Workmanship Warranty (Shelf life):
      a. Aerosol flooring adhesive shall be free from defects in material and workmanship for a period of three years from date of manufacture when handled, stored and transported according to adhesive manufacturer's requirements.

2. Delamination Warranty: Spray adhesive shall not delaminate:

NOTE TO SPECIFIER: Delamination warranty is 20 years when Spray-Lock Flooring Adhesive is applied to concrete substrates treated with Spray-Lock Concrete Protection.

a. Due to adhesive failure for a period of 20 years from date of installation when applied to adhere approved flooring materials according to adhesive manufacturer's requirements [on concrete substrates treated with SCP Products].

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide spray adhesive products by the following:
1. Spray-Lock, Inc., 5959 Shallowford Road, Suite 405, Chattanooga, TN 37421; 423.305.6151; 423.305.6150 (fax); www.spraylock.com

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. USGBC 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 TO SPECIFIER: 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
d. Rating: Platinum

NOTE TO SPECIFIER: Select one of the following Versions:

e. Version: LEED v4 - BD&C (*Building Design and Construction*)
f. Version: LEED v4 - ID&C (*Interior Design and Construction*)

NOTE TO SPECIFIER: LEED v4 - O&M (*Operations and Maintenance*) is not applicable to this section.

2. Applicable LEED Credits: Performance requirements of the following

LEED Categories and Credits apply to this Section are met as follows:

NOTE TO SPECIFIER: Delete LEED rating system not required.

a. Indoor Environmental Quality (IEQ): LEED v4 – [BD&C] [ID&C]:
   1). IEQ Credit (1-3 points): Low-Emitting Materials; at least 90 percent, by volume, for emissions; 100 percent for VOC content.
      a). General Emissions Evaluation according to CDPH Standard Method v1.1–2010.
      b). Spray-Lock Flooring Adhesive tested VOC is 0.02 g/mL according to EPA Method 8260B.

2.3 ACCESSORIES

A. Spray-applied adhesive application accessories as recommended by the adhesive manufacturer.
   1. Aerosol Container Holder/Dispenser.

PART 3 - EXECUTION

3.1 EXAMINATION

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

A. Examination: Comply with Section 01 70 00, Execution and Closeout Requirements, 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, cleanliness and other conditions comply with requirements of spray-adhesive and finish-flooring manufacturers, and ready to receive Work.
         1). Verify that concrete substrates meet ASTM F710 and comply with flatness recommended by the finish-flooring manufacturer.
   2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

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

A. Preparation according to flooring manufacturer's written instructions, Section 01 70 00, Execution and Closeout Requirements and as follows:
   1. Provide and prepare substrates to ensure proper adhesion of flooring system in accordance with spray-adhesive manufacturer's instructions.

NOTE TO SPECIFIER: Delete substrates below that are not required for Project.

2. Portland-Cement Concrete Substrates: Prepare substrate according to ASTM F710, 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 to 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). Sweep or vacuum, and damp mop clean flooring substrates immediately prior to spray-applied adhesive installation.

3.3 APPLICATION

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

A. Apply spray-applied floor adhesive according to each floor-finish-assembly product manufacturer's written instructions, Section 01 70 00, Execution and Closeout Requirements 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 according to 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 inches (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. Upon completion of flooring installation, finish flooring will be immediately available after rolling for all range of use.

3.4 FIELD QUALITY CONTROL

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

A. Site Tests and Inspections: Comply with Section 01 40 00, Quality Requirements, 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 LEANING

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

A. Construction Waste Management: Comply with Section 01 70 00, Execution and Closeout Requirements, and as follows:
   1. Store and recycle cartons and aluminum adhesive containers.

3.6 CLOSEOUT ACTIVITIES

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

A. Perform closeout procedures according to Section 01 70 00, Execution and Closeout Requirements and as follows:
   1. Substantial completion requirements according to Section 1 70 00.
   2. Perform required Demonstration and Training with Owner's designated staff according to Section 1 70 00.
   3. Sustainable design closeout documentation according to Section 1 70 00.

B. Correct non-conforming Work according to General Conditions, and to the acceptance of the Architect.

END OF SECTION