

COUNTY OF COLE – MISSOURI



REQUEST FOR BID 2024-16: ELECTROSTATIC DISCHARGE (ESD) FLOOR INSTALLATION

SUBMISSIONS SHALL BE ACCEPTED THROUGH
THURSDAY, JULY 11, 2024 AT 3:00 p.m. CENTRAL

AND RECEIVED AT:

**COLE COUNTY COMMISSION
311 EAST HIGH STREET, ROOM 200
JEFFERSON CITY, MO 65101**

Company Name

Direct Contact Name (Typed/Printed)

Mailing Address

Title

City/State/Zip

Email

Office Telephone Number

Direct Line or Extension

I hereby certify that I am submitting the following information on behalf of the above-listed company and understand that by virtue of executing and returning with this response this REQUIRED RESPONSE FORM, I further certify full, complete and unconditional acceptance of the terms and conditions set forth herein, all attachments and the contents of any addendum or amendment released hereto. (Submission must be signed by an officer or employee having authority to legally bind the respondent.)

Authorized Signature

Authorized Name (Typed/Printed)

Title

Date

REQUEST FOR BID

Sealed offers will be accepted by the Cole County Commission for consideration in provision of the following:

2024-16 ELECTROSTATIC DISCHARGE (ESD) FLOOR INSTALLATION

Submissions will be received at the office of the Cole County Commission, 311 East High Street, Room 200, Jefferson City, Missouri until 3:00 p.m. on Thursday, July 11th, at which time they will be publicly opened and taken under advisement. Bidders should be aware that submissions are public record under state law. Specifications are available at www.colecounty.org or by contacting Jessica Bryant at (573) 634-9168 or jbryant@colecounty.org.

NEWS TRIBUNE: June 9, 16, 23

Legal Notices
Cole County Commission
311 East High Street
Jefferson City MO 65101

COLE COUNTY COMMISSION

PURCHASING

311 EAST HIGH STREET, ROOM 200
JEFFERSON CITY, MISSOURI 65101

REQUEST FOR BID

1.0 OVERVIEW

- 1.1 **NOTIFICATION.** This document constitutes a request for competitive, sealed offers per the provisions of this solicitation to obtain proposals for installation of an electrostatic discharge (ESD) flooring located at the Cole County Law Enforcement Building; 350 East High Street, Jefferson City, Missouri 65101.

Respondents are responsible for being thoroughly familiar with all specifications and requirements of this solicitation. Failure to examine any relevant document or provision thereof will not relieve the successful respondent from any obligation under this bid. Qualified organizations are invited to prepare an offer in response to this document and in doing so, concur with all terms, conditions, specifications and addenda to this bid unless specifically noted otherwise in a separate section within their response titled "EXCEPTIONS".

- 1.2 **PRE-BID MEETING.** An optional pre-bid meeting will be held on Thursday, June 27th at 9:00 a.m. Attendees are to meet at the Cole County Law Enforcement Building classroom located at 350 East High Street, Jefferson City, Mo 65101 at approximately 9:00 a.m. Attendance is not prerequisite for submitting a response to this invitation. This meeting will provide an opportunity for potential respondents to view the site of work and ask questions/seek clarification on the outlined requirements prior to submitting a response.
- 1.3 **QUESTIONS, REQUESTS FOR CLARIFICATION OR INTERPRETATION.** Respondents are advised that all questions concerning the meaning or intent of these specifications must be submitted **IN WRITING** and received at least five (5) business days prior to the date scheduled for bid opening. All inquiries shall be directed to:

Jessica Bryant, Purchasing Agent
jbryant@colecounty.org

As of the issuance date of this solicitation and continuing until the final date for acceptance of submissions, all respondents are specifically directed not to discuss, hold meetings, conferences, or technical discussions with any County employee for the purpose of responding to this solicitation except as otherwise permitted by this bid document. Respondents should not otherwise ask any County officials or employees questions about the bid or related issues, either orally or by written communication. Respondents directly contacting other County employees risk elimination from further consideration.

- 1.4 **ISSUANCE OF ADDENDA.** Every attempt shall be made to ensure that all written questions receive an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all respondents will be advised of any questions submitted, the County's response, and any other pertinent information related to this solicitation via the issuance of addenda, which will be posted at www.colecounty.org. All issued addenda are incorporated by reference as if fully set out herein. An addendum may contain information that could affect bid responses. Respondents are cautioned that the only official position of Cole County is that which is issued by Cole County in these specifications or by addendum thereto; no other means of communication, whether written or oral, shall be construed as a

formal or official response or statement. It shall be the responsibility of the respondent to verify whether or not any addenda have been issued prior to submitting a bid response to Cole County.

The County assumes no liability if a respondent fails to incorporate addenda into their bid. Failure to have requested an addendum covering any questions affecting the interpretation of these specifications shall not relieve the awarded party from delivering the completed project, product and/or service in accordance with the intent of these specifications.

1.5 SUBMISSION REQUIREMENTS. A fully executed response, including the specification pages comprising this invitation and any related illustrative documentation and/or issued addenda shall:

- Be submitted in a sealed envelope identified by bid number, bid title, and bid opening date/time;
- Be complete and signed by an official authorized to obligate company submitting the bid;
- Include (1) complete original bid and two (2) exact duplicates.

It is the responsibility of each respondent to deliver its submission to the office of the Cole County Commission, 311 East High Street, Room 200, Jefferson City, Missouri on or before the date and exact time indicated for public bid opening. Fax and email submissions will not be accepted or considered. Responses will be time and date stamped; those received late will be determined non-responsive without exception. Late bids may be returned unopened to the respondent upon request within ten (10) business days after the bid opening. All returns will be made at the respondent's expense.

1.6 BID OPENING. Submissions will be publicly opened in the Cole County Commission Chambers on Thursday, July 11th at 3:00 p.m. Central. Respondents and the public are invited but not required to attend the formal bid opening. All documents will be made available for public inspection, but no decision relating to the award of the contract or agreement will be made at the bid opening.

1.7 ADVICE OF AWARD. Upon bid award by the Cole County Commission, award notification letters, including a bid tabulation summarizing responses received, will be sent via email to all parties submitting a response.

2.0 TERMS AND CONDITIONS

2.1 INCURRING COSTS. Cole County shall not pay for any information requested herein nor be obligated or liable for any cost incurred by any respondent in submitting a response.

2.2 RESERVATIONS. The right is hereby reserved to reject any or all submissions for any reason, in part or in whole, received in response to this solicitation; to waive or not waive informalities or irregularities in any response or the bidding procedures; to request supplementary information from respondents as determined necessary to effectively evaluate responses; to cancel this solicitation, advertise for new and/or purchase off of cooperative purchasing contracts; and to accept, request clarification or further negotiate the terms, conditions and/or methodology of any response if, in Cole County's sole judgment, the best interests of Cole County will be so served.

2.3 MODIFICATION/WITHDRAWAL. Receipt of written notice or an in-person request from a properly identified individual prior to the official date and time set for bid opening must occur in order to modify or withdraw a submission which has been delivered to the office of the Cole County Commission.

2.4 VALIDITY. Respondents agree that submissions will remain valid for consideration by Cole County for a minimum period of ninety (90) calendar days after the date specified for bid opening.

- 2.5 **RESPONSE MATERIAL OWNERSHIP.** All material submitted in response to this solicitation becomes the property of Cole County and may be disclosed upon proper Sunshine Law request per 610.021(12) RSMo.
- 2.6 **EXCEPTIONS.** The wording of this solicitation may not be changed or altered in any manner by a respondent. Changes, additions or limiting provisions made on the invitation will render the bid informal and may cause its rejection. Taking exception to any clause in part or in whole does not necessarily disqualify a respondent; any such exception shall be clearly identified and described in full detail in the respondent's submission on a separate page clearly titled "EXCEPTIONS." Any exception will be evaluated and accepted or rejected by Cole County, whose decision shall be final and conclusive. In the absence of such declaration(s), the response shall be accepted as in strict compliance with all terms, conditions, and specifications and the awarded party shall be held responsible for providing the product or service accordingly.
- 2.7 **RESTRICTIVE LANGUAGE.** It shall be the responsibility of potential respondents to ask questions, request changes or clarification, or otherwise advise Cole County if any language, specification or requirement of this solicitation appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit responses to a single source. Such notification must be directed to the Purchasing Agent and received at least five (5) business days prior to the date set for bid opening.
- 2.8 **INTERPRETATION.** If a respondent has any questions which arise concerning the true meaning or intent of these bid documents, plans or any part thereof which affect the cost, quality, quantity, or character of the project or service, respondent shall request in writing that an interpretation be made and an addendum be issued which shall then be posted at www.colecounty.org. Failure to have requested an addendum covering any questions affecting the interpretations of the bid documents shall not relieve the successful respondent from delivering the product, service or completed project in accordance with the intent of the bid documents. Should any differences arise as to the meaning or intent of these specifications, Cole County's interpretation shall be final and conclusive.
- 2.9 **EQUIVALENT MATERIAL/EQUIPMENT.** Any listed manufacturer/model number(s) or a definite reference to a particular item or piece of equipment is intended to establish a minimally acceptable design, type, quality, functional capacity, and/or desired performance level. It is to be understood that any equivalent alternate which will perform adequately the duties imposed by the general design may be proposed and bid so long as sufficient details necessary to establish equivalency are included in the submission. Acceptance is subject to approval of the County which may request further information, sample(s) and/or a demonstration prior to bid award. Cole County shall be the sole judge of equivalency.
- 2.10 **LIKE OR SIMILAR PRODUCT.** Cole County reserves the right, at its sole discretion, to obtain like or similar product to that which has been specified herein when use of such product is deemed in the best interest of the County.
- 2.11 **QUALIFICATIONS OF RESPONDENTS.** Cole County may make such investigations as deemed necessary to determine the ability of any respondent to provide the product and/or service described herein. Respondent shall furnish to the County all such information and data for this purpose that the County may request. The County reserves the right to reject any submission if the evidence submitted by the respondent or investigation of such respondent fails to satisfy the County that such respondent is properly qualified to carry out the obligations of the contract and/or to complete the work contemplated herein.
- 2.12 **EVALUATION & BASIS OF AWARD.** The County's sole purpose in the evaluation process is to determine from among the responses received which one is best suited to meet the County's needs at the lowest possible cost. Any final analysis or weighted point score does not imply that one bidder is

superior to another, but simply that in our judgment the contractor selected appears to offer the best overall solution for our current and anticipated needs at the lowest possible cost. Award shall be made to the lowest responsible bidder(s) whose offer best responds to the quality, capacity, and service requirements of Cole County, as determined by the County. Award may be made on an item-by-item basis to the lowest and best bids or award may be made to the lowest and best bid overall, whichever the County determines is in its best interest.

- 2.13 **PRICES.** Prices must be stated in units of quantity specified and must be firm. Price submitted for each item shall include all cost, of whatever nature, that is involved in achieving the good or service per the bid documents. Bids qualified by escalator clauses may not be considered.
- 2.14 **TAX EXEMPTION.** Cole County is funded by public monies and as such has been approved by the State of Missouri for sales/use tax-exempt status. The Missouri tax identification number and certificate is available to the awarded party upon request.
- 2.15 **DELIVERY.** If requested, the delivery date or when work will start shall be stated in definite terms as they may be taken into consideration when making award. Cole County reserves the right to cancel all or any part of an order or project if delivery is not made or work not started as guaranteed.
- 2.16 **DEFAULT.** In case of default by the bidder or contractor, Cole County may procure the articles or services from other source(s) and hold the successful respondent responsible for any excess cost occasioned thereby.
- 2.17 **ACCEPTANCE.** No equipment, supplies, materials and/or services received by Cole County pursuant to this solicitation shall be deemed accepted until the County has had reasonable opportunity to inspect. Cole County reserves the right to reject anything that does not comply with reasonable expectations based on the specifications outlined herein.
- 2.18 **SHIPMENTS.** All shipments and deliveries shall be F.O.B. destination, freight prepaid to Jefferson City, Missouri.
- 2.19 **COMPLIANCE WITH APPLICABLE LAW.** The contractor must agree to comply with all federal, state, and local laws or ordinances, and all applicable rules, regulations, and standards established by an agency of such governmental units, which are now or hereafter promulgated insofar as they relate to the Contractor's performance of the provisions of the agreement. It shall be the obligation of the Contractor to apply for, pay for and obtain all permits and/or licenses required by a governmental agency for the provision of those services contemplated herein.
- 2.20 **AS NEEDED, IF NEEDED.** The contractor shall provide product or service on an "as needed, if needed" basis for Cole County in accordance with the provisions and requirements stated herein. The resulting award or contract does not guarantee that all purchases of this nature will go to the successful respondent(s), but rather establishes primary vendor(s). Any usage quantities included in this request are based on estimated need; Cole County reserves the right to increase or decrease quantities to meet actual need and maintain the quoted pricing.
- 2.21 **ASSIGNMENT.** The awarded party shall not assign the contract, subcontract, or sublet it as a whole without the prior written consent of Cole County. Assignment, subcontracting, or subletting without such consent will in no way relieve the awarded party of any of its obligations under this Contract unless specified, in writing, by Cole County.
- 2.22 **PREFERENCE.** In making bid awards, Cole County shall give preference to all firms, corporations, or individuals that maintain office or places of business within the County of COLE when the quality of the commodity or performance promised is equal or better and the price quoted is the same or less.

2.23 **APPROPRIATION OF FUNDS.** Financial obligations of Cole County payable after the first fiscal year the system is in place are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available. In the event funds are not appropriated, any resulting Contract will become null and void, without penalty to Cole County.

2.24 **COOPERATIVE PROCUREMENT.** Various State Agencies, City and County Offices, and/or any other government entity may or may not request an unknown quantity of goods or services under this bid during the effective period or resulting agreement period at the same prices, terms and conditions.

If the awarded party agrees to cooperative procurement, it is agreed and understood that each participating political subdivision will make its own separate contract with the awarded party; that each participating political subdivision shall only be liable to the awarded party for service, materials or supplies for which it has directly contracted without any liability for purchases contracted for by any other participating political subdivision; and each awarded party shall be required to bill each participating political subdivision separately and directly for the service, materials or supplies it has purchased.

In the event of any dispute between a political subdivision and a awarded party arising after a contract of purchase has been executed, such dispute shall be handled by and between the particular political subdivision affected and the awarded party.

2.25 **ANTI-DISCRIMINATION AGAINST ISRAEL ACT.** The contractor certifies that it is not currently engaged in and shall not, for the duration of the contract, engage in a boycott of goods or services from the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the law of the State of Israel; or persons or entities doing business in the State of Israel.

2.26 **INDEMNIFICATION.** The successful respondent shall, at its own expense, protect, defend, indemnify, save and hold harmless Cole County and its elected and appointed officers, employees, servants and agents from all claims, damages, lawsuits, costs and expenses, including, but not limited to all costs from administrative proceedings, court costs and attorney fees that Cole County and its elected and appointed officers, employees, servants and agents may incur as a result of the acts, omissions or negligence of the contractor or its employees, servants, agents or subcontractors that may arise out of the agreement. The contractor's indemnification responsibility under this section shall include the sum of damages, costs and expenses which are in excess of the sum of damages, costs and expenses which are paid out in behalf of or reimburse to the County, its officers, employees, servants and agents by the insurance coverage obtained and/or maintained by the contractor.

2.27 **FEDERAL WORK AUTHORIZATION PROGRAM.** Proposers that meet the definition of a business entity as defined in section 285.525, RSMo, pertaining to section 285.530, RSMO, providing services exceeding \$5,000, shall maintain enrollment and participation in a federal work authorization program with respect to the employees hired after enrollment in the program who are proposed to work in connection with the contracted services included herein. If the Proposer's business status changes during the life of the contract to become a business entity as defined in section 285.525, RSMo, pertaining to section 285.530, RSMo, then the Proposer shall, prior to the performance of any services as a business entity under the contract enroll and participate in a federal work authorization program such as E-Verify.

Proposers must, by sworn affidavit and provision of documentation (copy of the E-Verify Memo of Understanding Electronic Signature Page), affirm their enrollment and participation in a federal work authorization program. Proposers shall sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. See Affidavit of Compliance with E-Verify document.

For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify is an example of this type of program. Information regarding E-Verify is available at <https://www.e-verify.gov/>.

2.28 CONTRACT TERMINATION.

2.28.1 **TERMINATION FOR DEFAULT.** If, through any cause, the awarded party shall fail to fulfill, in a timely and proper manner, its obligations under the contract resulting from this solicitation, or if the awarded party shall violate any of the covenants, agreements, or stipulations of said contract, Cole County shall thereupon have the right to terminate this contract for cause by giving written notice to the awarded party of its intent to terminate and at least ten (10) calendar days to cure the default or show cause why termination is otherwise not appropriate. In the event of termination, all finished or unfinished documents, data, studies, survey, drawings, maps, models, photographs, and reports or other materials prepared by the awarded party under this contract shall, at the option of Cole County, because its property, and the awarded party shall be entitled to receive just and equitable compensation for any services and supplies delivered and accepted. The awarded party shall be obligated to return any payment advanced under the provisions of this contract.

Notwithstanding, the awarded party shall not be relieved of liability to Cole County any damages sustained by the County by virtue of any breach of the contract by the awarded party, and the County may withhold any payment to the awarded party for the purpose of mitigating its damages until such time as the exact amount of damages due the County from the awarded party is determined.

If after such termination it is determined, for any reason the awarded party was not in default, or that the awarded party's action/inaction was excusable, such termination shall be treated as a termination for convenience, as described herein.

2.28.2 **TERMINATION FOR CONVENIENCE.** The performance of work under the contract resulting from this solicitation may be terminated by Cole County in whole or in part at such time that the Cole County Commission determines that such termination is in the best interest of Cole County. Any such termination will be affected by delivery to the awarded party of a letter of termination specifying the extent to which performance of work under the contract is terminated and the date upon which such termination is effective:

After receipt of a termination letter the awarded party will:

- Stop work on the contract on the date and to the extent specified in the letter.
- Place no further orders for materials, services or facilities except as may be necessary to complete any portions of the work under contract not terminated.
- Complete on schedule such part of the work as will not be terminated.

3.0 SCOPE OF WORK

3.1 **OVERVIEW.** The County is currently seeking installation of an electrostatic discharge (ESD) floor in our data room located within the Cole County Law Enforcement Building located at 350 East High Street, Jefferson City, Missouri 65101.

3.2 **PROJECT TIMELINE.** It is intent of the County to award this project on or before July 23rd with work to begin as soon as possible. The contractor must include an estimated start date within the Bidder Response Form.

The contractor must have the project completed within 60 (sixty) days after the award.

- 3.3 **OCCUPANCY.** The Cole County Law Enforcement building will be occupied at the time of work, but the floor level that the data room is located is unoccupied. The contractor shall provide services during normal business hours. Normal business hours shall be Monday – Friday 8:00 A.M. – 4:30 P.M. The County will consider allowing access outside normal business hours, if discussed.

The successful contractor is to employ measures to maintain access and egress and to protect and maintain safety for the duration of work contemplated herein.

- 3.4 **WORK QUALITY AND WORK TASK.** All work performed by the contractor shall be conducted in a professional manner consistent with accepted and customary business standards for these services. Where not more specifically described in any of the various sections of these specifications, work shall conform to all of the methods and operations of best standards and accepted practices of the trade.

- 3.5 **SCOPE OF WORK.** The contractor must install an ARMOR-STAT ESD floor system in the data room located within the Cole County Law Enforcement Building. The contractor must also prepare the current surface for the ARMOR-STAT ESD floor system that is being installed. ARMOR-STAT ESD is an epoxy/urethane, pigmented, static dissipative floor coating system. This system provides a static dissipative floor from primer through the satin finish topcoat. ARMOR-STAT ESD provides an average of 5v Body Voltage Generation when utilizing dissipative footwear. Resistance readings are consistent for the life of the floor and are independent of ambient humidity. ARMOR-STAT ESD protects new and existing concrete floors from many chemicals and was designed to provide the ultimate in wear resistance, chemical resistance and cleanability. The system is designed for areas where dirt or dust cannot be tolerated while providing static dissipation to protect against electrostatic discharge.

There is currently equipment set in the Data Room that will not be removed or moved. The contractors must work around the equipment while installing the ARMOR-STAT ESD floor.

3.5.1 **BENEFITS**

- Static Dissipative
- UV Stable
- Dissipates 5000 Volt charge to Zero in 0.01 seconds
- VOC Compliant
- Superior Wear Resistance
- Excellent Stain Resistance
- Easy to clean
- 5v Avg. BVG with Dissipative footwear

- 3.5.2 **COLOR.** The County is requesting ESD Standard Color of Beige.

- 3.5.3 **SURFACE PREPARATION.** The contractor must familiarize themselves with the Dur-A-Flex Product Date Sheet, Application Instructions, and Surface Preparation Guide. The contractor must read and understand all products involved with this project.

ARMOR-STAT ESD requires preparation in order to perform as expected. Substrate must be profiled, clean, sound, and dry. Substrate must be primed with DUR-A-GLAZE #4 ESD PRIMER. Refer to the Dur-A-Flex, Inc. Surface Preparation Guide for more information.

3.5.4 **MEASUREMENTS.** Reference Attachment A for the measurements and drawing of the Data Room (Data Center 101). The measurements are 20' 3" X 28' 8". The ARMOR-STAT ESD will NOT be installed in the Staff RR 102.

4.0 CONTRACTOR REQUIREMENTS AND QUALITY ASSURANCE

- 4.1 **CONTRACTOR EXPERIENCE.** The County wishes to engage an experienced flooring installer. Qualified businesses shall have a minimum of three (3) years' experience in installs of similar size and scope. References may be checked to assure they attest to your company's ability to perform the outlined work.
- 4.2 **MANUFACTURER SPECIFICATIONS/WARRANTIES.** All manufacturer specifications and any other conditions that could potentially affect manufacturer warranties must be observed in carrying out the work stated herein. Any defective work that was not completed in accordance with said manufacturer specifications that results in any manufacturer limiting or voiding their product warranty and the correction of such deficiencies shall be the responsibility of the Contractor.
- 4.3 **EXECUTION OF WORK.** Contractor will be responsible for reviewing work areas and reporting any unusual conditions which affect the cost as approved by the County. Work shall be halted until discrepancies or differences are resolved, corrected or otherwise addressed in writing by the County.
- 4.4 **DAMAGE.** Damage to County buildings or materials/equipment within those buildings are to be replaced or corrected by the Contractor at no expense to the County.

BID NUMBER 2024-16
BIDDER RESPONSE FORM

The undersigned agrees to enter into a contract with Cole County to provide the product(s) and services as follows:

SURFACE PREPARATION & INSTALLATION OF ARMOR-STAT ESD FLOOR SYSTEM:

\$ _____

PROPOSED TIMEFRAME

Availability to begin work: _____

Number of working days required for the Project: _____ days

WARRANTY INFORMATION (attached any documentation as necessary): _____

The Contractor has familiarized themselves with the Dur-A-Flex Product Date Sheet, Application Instructions, and Surface Preparation Guide.

YES / NO

Business Name

Date

Signature

ANTI-COLLUSION STATEMENT

STATE OF _____)

COUNTY OF _____)

_____ being first

duly sworn, deposes and says that he is _____
(title of person signing)

of _____

(Name of Bidder)

that all statements made and facts set out in the proposal for the attached bid are true and correct; and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid of any contract which result from its acceptance.

Affiant further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the attached bid .

(BY) _____

(BY) _____

Sworn to before me this _____ day of _____, 20 ____

Notary Public

My Commission expires: _____

Sample E-Verify Memo of Understanding – MOU Electronic Signature Page

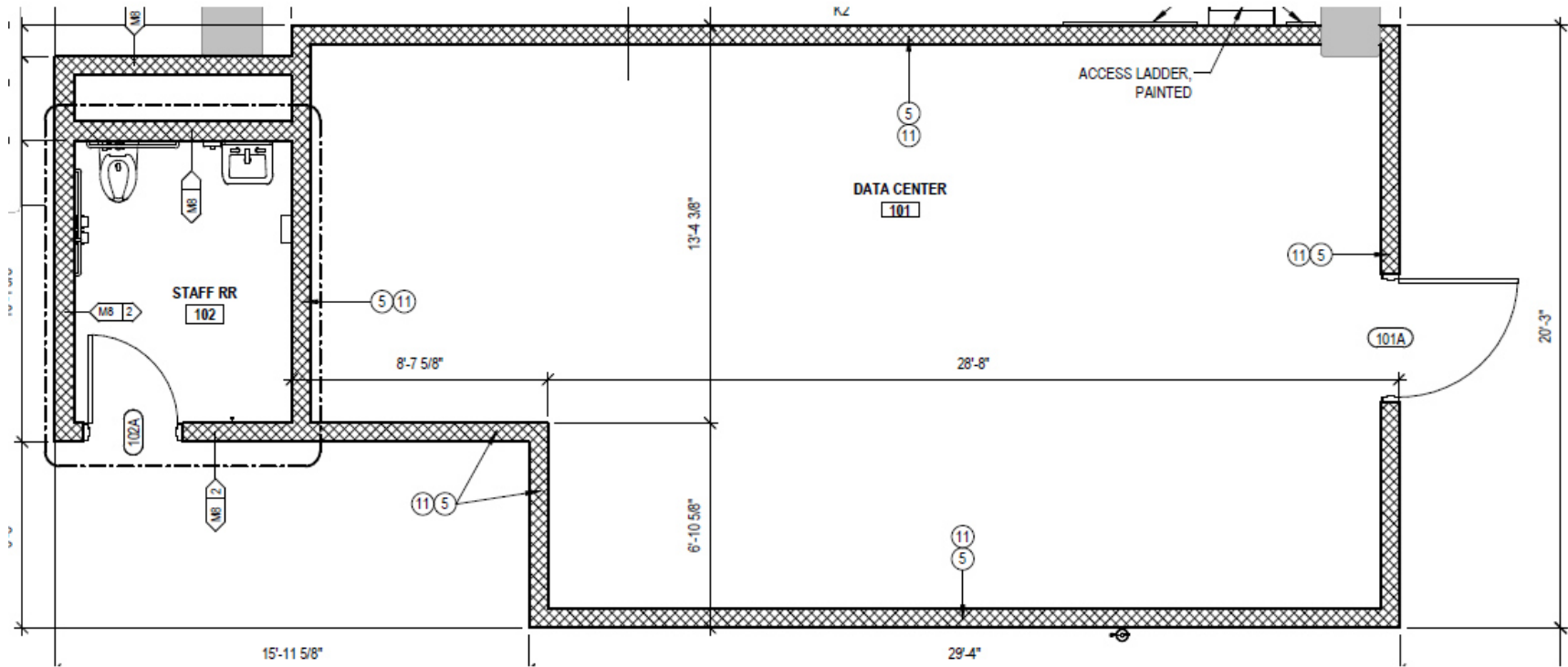


Company ID Number: XXXXXXXX

Approved by:

Employer <i>Your Company Name</i>	
Name (Please Type or Print) <i>John Doe</i>	Title
Signature <i>Electronically Signed</i>	Date <i>11/30/2023</i>
Department of Homeland Security – Verification Division	
Name (Please Type or Print) USCIS Verification Division	Title
Signature Electronically Signed	Date 11/30/2023

ATTACHMENT A





ARMOR-STAT ESD FLOOR SYSTEM

DESCRIPTION

ARMOR-STAT ESD is an epoxy/urethane, pigmented, static dissipative floor coating system. This system provides a static dissipative (10^6 - $10^9 \Omega$ /Square) floor from primer through the satin finish topcoat. ARMOR-STAT ESD provides an average of 5v Body Voltage Generation when utilizing dissipative footwear. Resistance readings are consistent for the life of the floor and are independent of ambient humidity. ARMOR-STAT ESD protects new and existing concrete floors from many chemicals and was designed to provide the ultimate in wear resistance, chemical resistance and cleanability. The system is designed for areas where dirt or dust cannot be tolerated while providing static dissipation to protect against electrostatic discharge.

BENEFITS

- Static Dissipative
- UV Stable
- Dissipates 5000 Volt charge to Zero in 0.01 seconds
- VOC Compliant
- Superior Wear Resistance
- Excellent Stain Resistance
- Easy to Clean
- 5v Avg. BVG with dissipative footwear

LIMITATIONS

This product is best suited for application in temperatures between 60°F and 85°F. Top-coating with non-conductive waxes or finishes will render the static dissipative properties ineffective. This product is not intended for use in munitions or explosive manufacturing facilities.

TYPICAL USES

- Pharmaceutical Facilities
- Processing Areas
- Clean Rooms
- Packaging Lines
- Laboratories
- Plastic Manufacturing
- AGV Warehouses
- Electronics Assembly

COLORS

ARMOR-STAT ESD is available in Arctic Grey, Medium Grey, Slate Grey, Smoke Blue and Beige.

PACKAGING

ARMOR-STAT ESD is packaged in kits consisting of resin, hardener, powder and grit (where applicable). Shelf life is 6 months in unopened containers.

SURFACE PREPARATION

This product requires preparation in order to perform as expected. Substrate must be profiled, clean, sound, and dry. Substrate must be primed with DUR-A-GLAZE #4 ESD PRIMER. Please refer to the Dur-A-Flex, Inc. Surface Preparation Guidelines for more information.

APPLICATION METHOD / SPREAD RATES

Please refer to the ARMOR-STAT ESD Application Instructions for more information.

GUIDE SPECIFICATIONS

This product is part of the DUR-A-FLEX family of polymer systems. Please refer to the master "Specifier's Guide" for complete three part guide specs.

DRAWINGS AND DETAILS

Standard CAD drawings and details are available for coves, drains, breaches, transitions, etc. Please refer to the master Detail Drawings in the Architect Center for actual drawings.

JOINT GUIDELINES

Refer to the Joint Guidelines on our website for complete details.

MOISTURE CONCERNS

Normal limits for moisture vapor transmission for epoxy floor systems are 3 lbs./1,000 sq. ft./24 hour using the calcium chloride test per ASTM F-1869 or 75% relative humidity using in-situ Relative Humidity Testing per ASTM F-2170. Please refer to the Floor Evaluation Guidelines on our website for complete details.

CLEANING

This product is considered a low maintenance flooring solution however, certain textures and service environments do require certain procedures. Please refer to our Cleaning Guide in the Contractor Center on our website for complete details.

CAUTION

Slight batch-to-batch color variations may occur. When

ordering to match a previous color, inquire if the same batch number or quality control number is still available. Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed. **KEEP OUT OF REACH OF CHILDREN.**

ARMOR-STAT ESD TECHNICAL INFORMATION		
Color	Arctic Grey, Beige, Medium Grey, Slate Grey and Smoke Blue	
Cure Time, Touch Dry at 70°F (per component)	8-10 hours	
Cured Film Thickness (nominal)	28 mils	
Toxicity	Non-Toxic, USDA approved	
PHYSICAL PROPERTY	TEST METHOD	RESULT
Surface Resistivity	ASTM D-257	10 ⁶ -10 ⁹ Ω/Square
Static Decay	Mil-Std-3010, Method 4046	0.01 Seconds
Body Voltage Generation (with dissipative footwear)	ESD STM 97.2	5V
Compressive Strength	ASTM D-695 ASTM C-579	16,000 psi 10,500
Tensile Strength	ASTM D-638 ASTM C-307	3,000 psi 1,950 psi
Tensile Elongation	ASTM D-638	7.5%
Flexural Strength	ASTM D-790 ASTM C-580	4,000 psi 2,900 psi
Hardness (Shore D)	ASTM D-2240	75-80
Linear Shrinkage	ASTM D-2566	0.02%
Linear Expansion	ASTM D-696	2 x 10 ⁻⁵
Bond Strength to Concrete	ASTM D-4541	400 psi substrate fails
Indentation	MIL D-3134	.025 MAX
Impact Resistance	MIL D-3134	Pass
Water Absorption	ASTM D-570	0.04%
Heat Resistance Limitation		140°F-200°F
Flammability	ASTM D-635	Self Extinguishing
Flame Spread/NFPA 101	ASTM E-84	Class A
Taber Abrasion Resistance CS17 Wheel 1000 GM Load 1000 Cycles	ASTM D 4060	29 mg loss (without grit) 5 mg loss (with grit)
Static Coefficient of Friction*	ANSI B101.1	>0.6
Dynamic Coefficient of Friction - Wet*	ANSI A326.3	>0.42
UV Resistance		Excellent
VOC Content		10 g/L

*Dur-A-Flex flooring systems can be built to meet or exceed the requirements of Static or Dynamic Coefficient of Friction testing per installation. Contact your Dur-A-Flex territory sales manager or tech representative for more information on alternative textures, grit/grip additives, or smooth coatings for your specific environment. A sample should always be obtained and tested prior to purchase for any non-slip flooring system.

IMPORTANT!

Before using DUR-A-FLEX products, read and understand its accompanying Safety Data Sheet & Application Instructions for important safety information.

STANDARD TERMS AND CONDITIONS OF SALE, INCLUDING STANDARD WARRANTY APPLY - VISIT **DUR-A-FLEX.COM** FOR THE LATEST VERSION

SURFACE PREPARATION GUIDELINES

DUR-A-FLEX, INC. has developed this document to help facility owners, architects, engineers, specification writers, and contractors gain a better understanding of the importance of a properly prepared substrate, and the methods to achieve an appropriate bond. This document is intended to be a general guideline, for specific jobsite information, please contact your local DUR-A-FLEX Representative.

There are many satisfactory methods for preparing a substrate to receive a DUR-A-FLEX flooring system. The preparation method is typically chosen based on service requirements, time allowed for entire process, and accessibility.

PERSONAL PROTECTION EQUIPMENT

It is the responsibility of the surface preparation contractor and the flooring contractor to insure that all personnel are properly protected from hazards. DUR-A-FLEX is committed to promoting awareness regarding these potential hazards. All DUR-A-FLEX products are rated according to the Hazardous Material Identification System (HMIS). OSHA regulations specify when, where, and how workers are to be protected. These regulations and the local OSHA officials should be consulted as necessary to insure proper protection, compliance with the law, and to avoid liability issues. Safety and health issues should be addressed prior to the start the job.

TESTING

Moisture Concerns

Please refer to the Floor Evaluation Guidelines in the Contractor Center of our website to assist in determining the condition of the concrete. Core analysis is recommended to determine the depth of soluble ion contamination which may contribute to osmotic blistering and floor system failure. DUR-A-FLEX offers in-house core testing using ion chromatography technology. Refer to the DUR-A-FLEX Core Analysis Program on our website for more information.

Testing for an Existing Sealer

Test to see if the floor is “sealed” by using the Water Break Test; please refer to ASTM 3191. If the poured water forms into droplets, then an existing sealer and/or paint may exist on the surface and must be removed by diamond grinding, steel shotblasting or other mechanical methods.

Salt Contamination Testing

Salt contaminated slabs that contain steel reinforcement are very susceptible to corrosion of the reinforcing steel. As the steel corrodes it expands causing cracking, delamination of concrete and any toppings bonded to it, and eventually, structural failure of the slab. Obvious signs of chloride or salt contamination are spalled concrete with exposed, rusted, reinforcing steel.

REMOVAL AND REPAIR

ASTM D 4258-83 Standard Practice for Surface Cleaning Concrete for Coating

This practice includes surface cleaning the concrete to remove grease, dirt, and loose material prior to the application of coatings. Procedures include vacuum cleaning, air blast cleaning, water cleaning, detergent water cleaning, and steam cleaning.

Removal of Bond Inhibiting Contaminants

This includes, but is not limited to removal of oils, grease, wax, sealers, curing compounds, laitance, salts, and any other hydrocarbon based materials. This will ensure that a good bond takes place between the resinous flooring and the concrete substrate.

Removal of Adhesives, Mastics and Membranes

In many retrofit projects, existing tile, VCT or sheet goods are being replaced with polymer flooring systems. Removal of the floor finish will often leave a layer of some type of mastic, adhesive or membrane. In thin applications these materials can often be completely cleaned up by shotblasting the concrete. In thicker applications, the steel shot will tend

to bounce, requiring additional preparation with the use of scarifying equipment or possibly even the use of chemical strippers. Wherever possible, consult the DUR-A-FLEX Tech Service Department or your local DUR-A-FLEX Flooring Contractor and schedule a site visit to investigate the best removal methods.

Removal of Existing Seamless Floor

Like mastics and adhesives, the need to remove an existing seamless floor will occasionally arise. There has been much progress made in the development of equipment for removal of resurfacers. Typically, removal requires a heavy grinder with “rotating heads”. These heads can be outfitted with different “teeth” or carbide blades for removal of a particular type of overlay.

REASONS FOR SURFACE PREPARATION

Surface preparation of a concrete substrate is required to remove surface laitance to create a surface profile and porosity for adhesion of polymer floor systems.

METHODS OF SURFACE PREPARATION

Care should be taken to define the degree of abrasion required for the coating system so that the concrete will not be eroded beyond what is necessary. All concrete surfaces should be abraded to remove laitance and contaminants. Concrete Surface Profile (CSP) is a reference developed by the International Concrete Repair Institute to help ensure a standard for surface profiles for coatings and toppings. (ICRI 310.2R-2013) The following table describes the required CSP for Dur-A-Flex systems.

DUR-A-FLEX SYSTEM BUILD CONCRETE SURFACE PROFILES

DUR-A-FLEX SYSTEM	CSP 1	CSP 2	CSP 3	CSP 4	CSP 5	CSP 6
Vent-E						
Dur-A-Glaze Grind and Seal						
Accelera S Armor-Stat ESD Cryl-A-Shield Dur-A-Gard* Dur-A-Gard ESD Dur-A-Gard MR* Mica-Flex M ReFLEXions*						
All Hybri-Flex Systems Accelera B Cryl-A-Floor SL Accelera C Cryl-A-Gard SL Accelera Q Cryl-A-Quartz SL Accelera HB Dur-A-Chip Accelera HC Dur-A-Gard SL Accelera HQ Dur-A-Quartz Accelera RXC Mica-Flex E Cryl-A-Chip Shop Floor Cryl-A-Floor Shop Floor MR Cryl-A-Quartz Poly-Crete SLB Cryl-A-Chip SL						
Poly-Crete MD Poly-Crete MDB Poly-Crete MDC Poly-Crete MDQ						
Dur-A-Crete Poly-Crete HF						

The Concrete Surface Profiles listed are for standard Dur-A-Flex system builds. Surface conditions can vary from job to job. For questions with preparing, or priming substrates or installing systems in varying environmental conditions, please contact your local Dur-A-Flex Technical Services Manager or Territory Sales Manager for a site visit and/or verification.

* When priming using Dur-A-Glaze MVP Primers, a CSP of 3-4 is recommended. Note: this may result in blast lines being visible in the finished coating.

Concrete Surface Profile (CSP) is a reference developed by the International Concrete Repair Institute to help ensure a standard for surface profiles for coatings and toppings. (ICRI 310.2R-2013)

Shotblasting

Shotblasting is an excellent method for surface preparation of concrete for most polymer floor installations. Shotblast equipment utilizes an alloy wheel spinning at high speeds to throw small steel particles at the substrate in a controlled, dry, 99% dust-free operation. This process removes surface contamination, adds profile and vacuums the concrete clean in one process. The size and angularity of shot, along with the travel speed of the unit, can be adjusted to determine the degree of the surface profile. Because shotblasting is a dry preparation process, it allows the installation to begin immediately after completion of prep (surface must be dry before blasting). Shotblasting will also identify weak areas in the surface of the concrete.

Diamond Grinding

Diamond grinding is another preferred choice for preparing concrete for polymer floor systems. Diamond grinders are floor grinders equipped with diamond abrasives. With multiple grit options available they are capable of achieving a wide range of concrete surface profiles appropriate for most resinous flooring systems. Additionally, diamond grinding is used for mechanically profiling and removing existing coatings and adhesives. Immediately after diamond grinding, vacuuming is required to remove all dust from the substrate.

Hand Tool

Hand tool preparation consists of the use of mechanical tools and equipment designed to abrade or chip away the surface of the concrete. Common tools available include chipping hammers, hand held diamond grinders and concrete crack chasing saws. These tools are typically used to make keyways, and prepare edges against walls and columns.

NOTE: When selecting method for preparation for coating systems, any deviation greater than the system thickness needs to be pre-patched or the blast patterns or track lines may be visible.

TYPES OF SUBSTRATES

Regular Concrete

Regular concrete surface must be prepared with a steel shotblast machine or diamond grinder. Floors with oil, grime and grease should first be cleaned with Simoniz 969 cleaner / degreaser before preparing. Allow floor to dry. Good ventilation, fans and/or auxiliary heat will accelerate drying time. Do not use oil fired portable heaters.

Replacement of Structurally Deteriorated Concrete

Replacement of structurally deteriorated concrete must be done in accordance with The International Concrete Repair Institute (ICRI) Bulletin. Patching material must be a DUR-A-FLEX approved patching material. Make sure of minimum cure time before installation of resinous flooring. DUR-A-FLEX Flooring Contractors should be contracted whenever possible to complete these repairs appropriately.

Fiber Filled Concrete

Fiber filled concrete must be burned with a propane weed burner, swept and vacuumed perfectly clean, and then primed. When primer has completely cured, the floor must be sanded and tack ragged. (This step may not be necessary for thick resurfacing systems).

Quarry / Ceramic Tile

Quarry / Ceramic tile have been successfully resurfaced on many projects without the removal of the tile and setting bed. A site investigation along with cores through the entire slab will help identify the type of setting bed, the existence of any waterproofing membranes, additional toppings, or other unusual existing conditions. Water trapped within the floor will create long-term sanitation and performance problems.

If the tile is well bonded and placed over an unsaturated latex setting bed, the floor may be resurfaced. Please refer to your DUR-A-FLEX Technical Services Manager to determine appropriate mechanical surface prep method, fillers, and products.

Existing Epoxy Coating / Resurfacer

Existing seamless floors may be resealed or resurfaced from time to time due to excessive wear, or the need to change the appearance or skid-resistance of the floor. The existing floor should first be cleaned and degreased with either EZ-CLEAN floor cleaner / degreaser or Simoniz 969 cleaner. It must then be mechanically abraded to totally remove the gloss and vacuumed perfectly clean. "Tack rag" area to remove remaining dust. Consult your Technical Services Manager to determine the best preparation for the individual coatings.

Plywood

The plywood substrate must be sound and non-flexing under the expected load. Typical plywood substrate must be exterior or marine grade, new, clean, and smooth finish (NO KNOTS). Two layers with staggered joints are required. Plywood should be positively fastened to the existing surface with a high-quality construction adhesive as well as a 6" screw pattern. For further information on plywood substrates, please contact your local sales representative or DUR-A-FLEX technical department.

WALLS

For Dur-A-Wall Applications:

Block Wall

Apply Dur-A-Flex BLOCK FILLER to fill pores over new or existing concrete block following the application instructions.

Drywall

Drywall must be finished to a level #5 paint-ready finish prior to coating. Prime with Dur-A-Flex GRIPPER PRIMER. Substrate will affect final appearance of wall coating.

NOTE: Dur-A-Wall products require preparation in order to perform as expected. Substrates must be clean, sound and dry. If installing over substrates other than block wall or drywall please consult Dur-A-Flex Technical Services.

CRACKS AND JOINTS

Cracks and joints are treated on a case by case basis. For more information on treating cracks and joints, refer to the DUR-A-FLEX Joint Guidelines or Crack Treatment Guidelines in the Contractor Center section of our website, or contact your Technical Services Manager.

*For further assistance regarding this guide, please call your
Dur-A-Flex, Inc. Territory Sales Manager or your Technical Services Manager:
(800) 253-3539 or e-mail Contact_Us@Dur-A-Flex.com*