

Request for proposal

EPOXY FLOORING FOR DISTRICT BUILDINGS RFP# 2023-PUR-001

PROPOSALS MUST BE RECEIVED BY: 10:00 AM (CST) ON TUESDAY, FEBRUARY 28, 2023

Please mark your sealed envelope "RFP #2023-PUR-001 Epoxy Flooring for District Buildings Proposal" and deliver to the following address and person:

Lisa Patrick
Purchasing Supervisor
Lisa Patrick@isdschools.org

201 N. Forest Avenue Independence, MO 64050 816-521-5599 extension 61010

All questions, requests for information or clarification pertaining to this bid must be submitted in writing to the above e-mail address. The deadline for questions is Wednesday, February 15, 2023 at 2:00 PM (CST)

It is the responsibility of interested firms to check the website: http://sites.isdschools.org/purchasing/bids-and-rfps for any addendums or notices of information prior to the opening date and time of this RFP. All addendums must be signed and included with your submitted Proposal.



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Proposal Due:

February 28, 2023 10:00 a.m.

1. Background

1.1. Notice

- 1.1.1. Independence School District (the "District") seeks a contractor ("Contractor") to perform district flooring repair/replacement. If your firm is interested, please submit the information requested in this Request for Proposal (RFP) to the Independence School District office by 10:00 a.m. on February 28, 2023. All information necessary for the submittal is contained in this RFP.
- **1.2. RFP Schedule** The timeline listed below is the District's estimation of time required to complete the RFP process. All efforts shall be made to abide by this schedule; however, it is subject to change due to different circumstances.
 - 1.2.1. Issue RFP: February 3, 2023
 - 1.2.2. Pre-bid Meeting and Inspection of property your attendance is Mandatory in order to submit bid. It will be held on February 8, 2023 at 9:00 a.m. held at each site starting with William Chrisman High School 1223 N. Noland Road, Independence, MO 64050. Then the other sites will follow and the order will be determined at Pre-bid meeting.
 - 1.2.3. Deadline to submit written questions: February 15, 2023, 2:00 p.m.
 - 1.2.4. Deadline to submit proposals: February 28, 2023, 10:00 a.m.
 - 1.2.5. Vendor selection date: March 14, 2023, 6:00 p.m. ISD Board of Education Meeting

2. Description of Services (or Project)

2.1. Type

2.1.1. Epoxy Flooring

- 2.1.1.1. See Attachment A Tennent ECO-DFS Flake/ECO-HTS
- 2.1.1.2. All are to quote a Broadcast Flake 1/4 inch system with 3 color (base, 2 colors of flake) comparable with a 6" covebase. The wall systems are 1/8 inch Broadcast Flake.

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- 2.1.1.3. Include Flast-O-Coat Waterproofing Membrane &/or MVP Primer for any required moisture mitigation that may become required.
 - 2.1.1.3.1. Substitutions
 - 2.1.1.3.2. Acceptable Substitutions
 - 2.1.1.3.2.1. Sparta
 - 2.1.1.3.2.2. Tennant
 - 2.1.1.3.2.3. Dur-A-Flex
 - 2.1.1.3.2.4. Tnemec
 - 2.1.1.3.3. Substitutions must be noted on outside of BID envelope and be accompanied by documentation as to why it is comparable. A Sample must be provided and it is the sole discretion of the DISTRICT as to whether a substitute is equal or better.
- 2.1.2. Polished Concrete
- 2.2. Locations
 - 2.2.1. Sugar Creek Elementary School
 - 2.2.1.1. 11424 Gill Street, Independence, MO 64054
 - 2.2.1.1.1. See specific areas in Attachment B
 - 2.2.2. Sunshine Center
 - 2.2.2.1. 18400 E. Salisbury Road, Independence, MO 64056
 - 2.2.2.1.1. See specific areas in Attachment B
 - 2.2.3. William Chrisman High School
 - 2.2.3.1. 1223 N. Noland Road, Independence, MO 64050
 - 2.2.3.1.1. See specific areas in Attachment B
- 2.3. Equipment
 - 2.3.1. Provide all equipment needed to complete project.



2.4. Inspection

2.4.1. Contractor must visit site before submitting their proposal and be responsible for all measurements on the project. <u>Contractor is responsible for exact measurements</u>.

2.5. Project Schedule

- 2.5.1. Vendor selection date: March 14, 2023, 6:00 p.m. ISD Board of Education Meeting
- 2.5.2. Contract Date: March 14, 2023 All other Locations and areas in Attachment B
- 2.5.3. Planned commencement of service (this date is based on last day of school): June 1, 2023. Specific locations will be scheduled after contract awarded by working with Contractor and District.
- 2.5.4. Planned substantial completion of service: Site specific agreed upon by District time PO is issued.
- 2.5.5. Planned final completion of service: Site specific agreed upon by District time PO is

3. Scope of Services

3.1. Maintenance Coverage

3.2. Hours of service

District Buildings are available from 6:00 a.m. till 10:00 p.m. during non-student contact days.

3.3. Terms and conditions

- 3.3.1. Contractor is to provide tear out, disposal (& provide dumpster), protect existing flooring and installation to factory specifications as noted in their manufacturer specifications.
- 3.3.2. Exact styles, collection and colors will be picked by District after award of bid by winning Contractor.

3.4. Exclusions

3.5. Term

3.5.1.1. March 14, 2023 through August 12, 2023 with same pricing or agreed upon annual increase.

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- 3.5.2. Renewals- Contractor is to hold prices good for a period of 1 year from the Start date of June 1, 2023.
- 3.5.3. Start date
 - 3.5.3.1. June 1, 2023
- 3.5.4. Date of substantial completion
 - 3.5.4.1. August 7, 2023
- 3.5.5. Date of final completion
 - 3.5.5.1. August 14, 2023

4. Required Insurance

4.1. Liability

- 4.1.1. \$100,000 per incident
- 4.1.2. \$300,000 per year

4.2. Workers Compensation

4.2.1. Statutory limits

4.3. Bond

- 4.3.1. Bid: 5 percent of bid amount
- 4.3.2. Payment (executed with connection of Contract): 100 percent of amount of Agreement
- 4.3.3. Performance (executed with connection of Contract): 100 percent of Amount of Agreement

5. <u>Disclosures and notifications</u>

5.1. Conflicts of interest

5.1.1. Proposal must state whether proposer has any professional, business, or familial relationship with any current member of the Board of Education of the District or with any administrator of the District.

5.2. Cooperative Procurement

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5.2.1. Indicate whether, if the District accepted your proposal, you would provide the same products and services under the same prices and terms to any public school district or any other non-profit organization having membership Mid-America Council of Public Purchasing (MACPP), Mid-America Regional Counsel (MARC) or Greater Suburban Kansas City Joint Purchasing Cooperative (GSKCJPC- currently 20 local district members) and/or located within the greater Kansas City metropolitan trade area.

YES	_NO	SIGNATURE:	

- 5.2.2. The prices, terms, and conditions of this RFP and any subsequent term agreement would control the terms of any subsequent agreement from date of contract for a period of not less than 1 calendar year.
- 5.2.3. Organizations represented by MACPP, MARC or GSKCJPC have no obligation under the cooperative procurement agreement to use the RFP, proposal, or agreement unless they are specifically named in the RFP as a joint respondent.
- 5.2.4. The ordering jurisdiction will issue purchase orders and be responsible for all receiving, inspection, payments and other agreement administration.
- 5.2.5. Each jurisdiction that is a party to the joint proposal may act as Administrative Contracting Officer with responsibility to issue purchase orders, inspect and receive goods, make payments, and handle disputes involving shipment to the jurisdiction.

6. Contract terms

6.1. E-Verify

6.1.1. Missouri law requires all companies doing business under contracts greater than \$5,000 with government entities to attest that all their employees and subcontractor's employees are "lawfully present in the United States."

6.2. Prevailing Wage

6.2.1. Missouri law requires agreements to contain the following prevailing wage terms, **if the project is over \$75,000**: "A wage of no less than the prevailing hourly rates of wages for work of a similar character in the locality in which the work is performed shall be paid to all workmen employed by or on behalf of any public body engaged in public works exclusive of maintenance work" (§ 290.220) and "Not less than the prevailing hourly rate of wages specified in wage determination as requested from the State shall be paid to all workers performing work under this contract" (§ 290.250). The contractor shall

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forfeit as a penalty to the State, County, City, and County, City, Town, District or other political sub-division on whose behalf the contract is made or awarded. Ten (\$10.00) Dollars for each worker employed, for each calendar day, or portion thereof such worker is paid less than the said stipulated rates for any work done under this contract by him or by any sub-contractor under him. § 290.250. All payroll records of the contractor are to be submitted to the School District, with the approved Prevailing Wage Statement, prior to final acceptance of the project.

6.3. Liquidated Damages

6.3.1. The District may assess liquidated damages for work not completed as agreed upon for up to \$50 per day.

6.4. Applicable law

6.4.1. Missouri law will govern contracts entered into pursuant to this RFP.

6.5. Termination

6.5.1. The District may terminate contracts entered into pursuant to this RFP without cause upon 30 days' notice.

6.6. Compliance with laws and policies

- 6.6.1. Proposer must comply with all federal and state anti-discrimination laws.
- 6.6.2. All work shall be done in strict accordance with the provisions of the current edition of the building codes adopted by the City of Independence, Missouri and all city ordinances in effect during performance of this contract.
- 6.6.3. Contractor must be licensed to do business in the City of Independence.
- 6.6.4. All work shall meet or exceed the Americans with Disabilities Guidelines.
- 6.6.5. A-133 Compliance Supplement: The contractor must certify that they and their principals are not debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal Department or Agency.
- 6.6.6. Excessive Unemployment: The Missouri Department of Labor and Industrial Relations has determined that a period of "Excessive Unemployment" remains in effect and will remain in effect if the unemployment rate exceeds 5% in the state of Missouri. Only Missouri laborers and laborers from nonrestrictive states are allowed by law to be employed on Missouri's public works projects. (See Sections 290.550 through 290.580 RSMo).

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- 6.6.7. AHERA Notification: the District has completed the removal of friable asbestos in all District school buildings. In addition, all facilities have now been inspected by a certified asbestos inspector as required under the ASBESTOS HAZARD EMERGENCY RESPONSE ACT OF 1986 (AHERA). A copy of the AHERA Plan has been filed with the State of Missouri and a copy is on file with each building administrator. The AHERA Plan is available for inspection during regular school hours.
- OSHA Training: As a condition of the Contract entered pursuant to this RFP, a Contractor 6.6.8. must provide a 10-hour Occupational Safety and Health Administration (OSHA) Construction Safety Program ("Program") for Contractor's on-site employees as mandated by RSMo 292.675. Said Program must include a course in construction safety and health approved by OSHA or a similar program approved by the Missouri Department of Labor and Industrial Relations. This requirement includes the following: All of Contractors' on-site employees must complete the Program within 60 days of beginning work on the Project; Any employee found on the work site subject to this requirement without documentation of the successful completion of the Program will be given 20 days to produce such documentation before being subject to removal from the Project; Contractor's failure to comply with these requirements will subject it to penalties. Contractor shall forfeit as a penalty to the Owner \$2,500.00 plus \$100.00 for each employee employed by Contractor or Contractor's Subcontractor, for each calendar day, or portion thereof, such employee is employed to work under this Contract without the required training. Said penalty shall not accrue until the period in subsections 1 and 2 have elapsed. Contractor will be subject to said penalties notwithstanding any other provision to the contrary in this Construction Contract. Contractor shall require its contracts with all Subcontractors to contain these provisions. Contractor shall be responsible for penalties to Owner due to any Subcontractor's employees' failure to produce documentary evidence of training in the required Program. Contractor may withhold all sums necessary to cover any penalty from Subcontractor by suing in the circuit court of the county in which the project is located. Contractor shall have no right of recovery against Owner
- 6.6.9. Lead Paint Guidelines: After April 22, 2010, contractors and their individual crew members working in pre-1978 school buildings that are child occupied and residential properties will be required to obtain their Renovator Certification by an accredited EPA Training Provider.

6.7. Background Checks

6.7.1. Contracts entered pursuant to this RFP must require that all employees who have <u>unsupervised</u> interaction with students will be fingerprinted and background checked under the background checks required by the District's Board Policies. Results of

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background checks of employees working directly with students must be provided to District. District reserves the right to refuse to allow any employee access to students if the employee completes no background check acceptable to the District.

6.8. Indemnity

6.8.1. The District will not agree to indemnify any contractor for its own negligence, for injuries or damages that do not arise from acts or omission of the District, or for injuries or damages for which the District has sovereign immunity.

6.9. Change orders

6.9.1. Change orders that exceed the greater of \$15,000 or 5% of the total originally contracted amount are subject to Board approval prior to performance of the work and are subject to re-bid. (See Board Policy 7210.)

6.10. Proposed contract

6.10.1. Proposals must include a copy of proposed contracts or service agreements if available or disclose terms required by the proposer of this RFP.

7. Interpretation, Questions, Withdrawal

7.1. Interpretation

- 7.1.1. The District will make no oral interpretations for proposers of meaning of the terms in this RFP.
- 7.1.2. Requests for interpretations to the meaning of this RFP must also be made in writing to Independence School District no later than 2:00 p.m., February 15, 2023 and failure by the successful proposer to do so shall not relieve the proposer of the obligations to execute such services under a later interpretation by the school district.
- 7.1.3. All interpretations made to the proposers will be issued in addenda to the RFP and will be posted on the ISD website ISDSchools.org and be the sole responsibility of the Bidder to obtain and acknowledge.

7.2. Questions

7.2.1. Submit written questions to the following person:

Lisa Patrick
Purchasing Supervisor
lisa patrick@isdschools.org



201 N. Forest Avenue Independence, MO 64050 816-521-5599 extension 61010

7.3. Withdrawal

- 7.3.1. Any Contractor may withdraw his proposal prior to the scheduled closing time for receipt of proposals.
- 7.3.2. No proposal shall be withdrawn for thirty (30) days after the scheduled closing time for receipt of proposals.

8. Quote

- 8.1. Amount- U.S. Dollars
- 8.2. Rate- U.S. Dollars

9. Proposal submission and opening

9.1. Submission

9.1.1. Submit proposals in a sealed envelope marked "EPOXY FLOORING FOR DISTRICT BUILDINGS PROPOSAL 2023-PUR-001" and deliver to the following address and person:

Lisa Patrick
Purchasing Supervisor
lisa_patrick@isdschools.org
201 N. Forest Avenue
Independence, MO 64050
816-521-5599 extension 61010

9.2. Opening

9.2.1. The proposals will be opened and publicly read at the following location on the following date and time:

Date: February 28, 2023

Time: 10:00 a.m.



Location: Facilities Office

201 N. Forest Avenue Independence, MO 64050.

10. Reservation of Rights

10.1. INDEPENDENCE SCHOOL DISTRICT RESERVES THE RIGHT TO ACCEPT OR REJECT ANY OR ALL PROPOSALS AND WAIVE ANY INFORMALITY IN THE PROPOSAL OR REQUEST FOR PROPOSAL.

11. Proposal Evaluation

11.1. Award

- 11.1.1. The contract will be awarded to the firm submitting the best responsible proposal complying with this RFP if the proposal is reasonable and in the best interest of the District to accept. The firm selected will be notified at the earliest practical date. The decision regarding acceptability of any firm's qualifications/proposal shall remain entirely with the District, at the District's sole discretion. The criteria for making this judgment will include but not be limited to price, demonstrated capability, past work completed and general responsiveness to the RFP.
- 11.1.2. The District notifies all proposers that minority business enterprises will be afforded full opportunity to submit proposals in response to this Request and will not be discriminated against on the grounds of race, color, or national origin in consideration of an award. Proposer agrees that should any person who performs work because of race, religion, color, sex, national origin, or ancestry.
- 11.1.3. The District reserves the right to reject any or all proposals, to waive any informalities or technical defects in proposals, and unless otherwise specified by the District, to accept any item or groups of items in the proposal, as in the best interest of the District.

11.2. Acceptance Period

11.2.1. All proposal offers must be firm for 120 days to allow for a signed contract. After that, prices are to be good for 1 calendar year from the contract date of March 14, 2023 unless mutually agreed upon.

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Appendix A FEDERAL WORK AUTHORIZATION PROGRAM AFFIDAVIT

	l,	_, being of le	gal age and having been duly sworn upon my
oa	ath, state the following facts are true:		
1.	. I am over twenty-one years of age; and kno	w of the mat	ters set forth.
2.	. I am employed by("Comp	pany") and I	nave authority to issue this affidavit on its
	behalf.		
3.	. Company is enrolled in and participating i	n the United	d States E-Verify federal work authorization
	program regarding Company's employees	working in	connection with the services Company is
	providing to, or will provide to, the District,	to the exten	t allowed by E-Verify.
4.	. Company does not knowingly employ any pe	erson who is	an unauthorized alien in connection with the
	services the Company is providing to, or wil	I provide to,	the District.
FU	URTHER AFFIANT SAYETH NOT.		
Ву	y:		
	(individual signature)		
Fo	or		
	(company name)		
Tit	itle:		
Su	ubscribed and sworn to before me on this	day of	, 202
			NOTARY PUBLIC
Μy	Ny commission expires:		
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Appendix B

REFERENCES AND EXPERIENCE

How many years has your firm been in business?	Years
heing proposed	with other school districts or governmental services in the same type and size to the project
School District/Business	· · · · · · · · · · · · · · · · · · ·
Address	
Contact Person	Phone#
Description of services performed and comp	oletion date
School District/Business	
Address	
Contact Person	Phone#
Description of services performed and comp	oletion date
School District/Business	
Address	
Contact Person	Phone#
Description of services performed and comp	oletion date



Appendix C

PERSONNEL QUALIFICATIONS

Bidders are REQUIRED to p	rovide the information below in	n FULL DETAIL.			
Indicate the person who will work.	be supervising project and yea	ars of experience in similar			
Name:	Name: Number of Years:				
Type of Experience:					
relating to the scope of this project companies in the last five years. A	ees that would be working on this pro for other school districts and/or gove ttach a separate sheet of paper if ne	ernmental agencies or private eded.			
EMPLOYEE NAME	QUALIFICATIONS	EXPERIENCE/TRAINING			



Appendix D BID PROPOSAL SUBMISSION FORM – Epoxy Flooring for District Buildings

Proposal of		(hereinafter called	
"Bidder"), organiz	ed and existing unde	r the laws of the	State of, doing business as
a corporation,	a partnership,	an individual	(circle one) to the Board of Education, School District
of Independence,	Missouri (hereinafte	r called "Owner").	

- 1. In compliance with your Advertisement for Bids, Bidder hereby proposes to perform all work for the INDEPENDENCE SCHOOL DISTRICT Epoxy Flooring for District Buildings. In strict accordance with the Contract Documents, within the time set forth herein and at the prices stated below, bidder should propose on individual base bids for specific project locations as noted below. Owner will award contract per individual base bid.
- 2. By submission of this Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to its own organization, that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.
- 3. Bidder acknowledges receipt of the following ADDENDA:
- 4. The undersigned, having familiarized itself with local conditions affecting the cost of the work at the place where the work is to be done and with all Bidding Documents, including the Instructions to Bidders, Plans and Specifications, General and Supplementary Conditions, the Standard Form of Agreement and the other Contract Documents, and having examined the location of the proposed work and considered the availability of labor and materials, hereby proposes and agrees to perform everything required to be performed, and to provide and furnish any and all labor, materials, supervision, necessary tools, equipment, and all utility and transportation service necessary to perform and complete in a workmanlike and timely manner all of the work required for the project, all in strict conformance with the Instructions to Bidders and other Contract Documents (including Addenda noted above, the receipt of which is hereby acknowledged), for the lump sums hereinafter specified.

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Appendix D (Cont)

RESPECTFULLY SUBMITTED:				
Signature	-	Title		
Name (Please type or write clearly)	-	Date		
Company Name		Telephone Number	Fax Number	_
Street		Email address		
City, State, Zip Code	-	License number (if appl	icable)	
By signing, he/she certifies that they are an	authorized agent	of said company and has	the authority to legally	enter
into a binding Service Agreement.				
SEAL – (If BID is by a corporation)				

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Appendix D (Cont)

BID SHEET	
Project:	Epoxy Flooring for District Buildings
RFP#:	2023-PUR-001
Owner:	Independence School District
Date:	February 28, 2023
Contractor Name	

Schools	Sugar Creek Elementary School	Sunshine Center	William Chrisman High School	Total
Location Addresses	11424 Gill Street, Sugar Creek, MO 64054	18400 E Salisbury Road, Independence, MO 64056	1223 N. Noland Road, Independence, MO 64050	
1. Broadcase Flake 1/4 inch system with 3 color (base, 2 colors of flake) comparable with 6" covebase, include Flast-O-Coat Waterproofing Memebrane &/or MVP Primer for any required mositure mitigation. The wall systems are 1/8 inch Broadcast Flake. 2. Include any additional supplies needed	\$ -	\$ -	\$ -	\$ -
Disposal (Provide dumpster), Removal Charges, Installation Charges, Freight and Delivery Charges	-	\$ -	\$ -	\$ -
TOTAL BID	\$ -	\$ -	\$ -	\$ -
Bid Bond				\$ -
Warranty in Years				
\$/SF Moisture Barrier				
\$/Sq Ft if 5,000 sq ft				
Wet Wall Capable? Y or N				

ompany Name:
rinted Name:
ignature:
Pate:

1/8ARCHITECTURALGUIDESPECIFICATION

Eco-DFS™ Flake / Eco-HTS

Decorative Flake System (Broadcast) 1/8 inch Satin Finish Urethane Topcoat



Tennant Company, 701 North Lilac Drive, P.O. Box 1452, Minneapolis, MN 55440-1452 800-553-8033 / www.tennantfloorcoatings.com
© Tennant Company 02/23/06

Division 9

Section - Resinous Flooring

PART 1 - GENERAL

1.01 Summary

A. A filled two-component, 100% solids epoxy that consists of epoxy resin and colored flake chips topcoated with a proprietary three-component moisture-cure urethane for an attractive, slip-resistant surface with superior abrasion resistance on interior concrete floors. Complies with VOC Rules and Regulations.

1.02 Performance Requirements

A. See manufacturer's technical data bulletin for specific material, cured coatings and a complete list of chemical resistant properties.

1.03 Submittals

- A. Product Data: Submit manufacturer's product data, including physical properties, chemical resistance, surface preparation and application instructions.
- B. Submit list of five projects similar in nature, which have been installed by applicator during the last five years, identified with project name, location, name of owner's representative, their phone number and date.
- C. Submit manufacturer's standard warranty and applicator's warranty.

1.04 Quality Assurance

- A. Applicator Qualifications:
 - A minimum of three years' experience in the application of coatings or resurfacers to concrete floors.
 - 2. A minimum of ten jobs or 1,000,000 square feet of successful applications.
- B. Pre-Application Meeting: Convene a pre-application meeting 2 weeks before the start of application of floor coating system. Require attendance of parties directly affecting work of this section, including the Contractor, Architect, Applicator and Manufacturer's Representative. Review the surface preparation, application, cleaning, protection and coordination with other work.

1.05 Delivery, Storage and Handling

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in accordance with manufacturer's instructions.
 - 1. Store materials in dry, enclosed area with adequate protection from moisture.
 - 2. Keep containers sealed until ready for use.
 - 3. Storage Temperature: 65°F (18°C) and 90°F (32°C).
- **1.06 Warranty** A. Written manufacturer's warranty covering materials only. Applicator to provide application warranty.

PART 2 - PRODUCTS

2.01 Materials

- A. : Decorative Flake
 - 1. Percent Solids, 100 ASTM D2369

- 2. Completely light stable over the normal life of the coating.
- B. Resin for random seed coats: Tennant Eco-MPE™ Multi-Purpose Epoxy. A two-component epoxy.
 - 1. Volatile Organic Compound (VOC), ASTM D3960
 - 1. 0 lb/gal or 0 g/L
 - 2. Tensile Strength, ASTM D2370
 - 1. 8,000 psi or 55,200 kPa
 - 4. Percent Elongation, ASTM D2370
 - 1. 5%
- C. Tennant Eco-HTS™ Satin Urethane Topcoat. A three-component moisture-cure urethane.
 - 1. Volatile Organic Compound (VOC), ASTM D3960
 - 1. <1.1 lb/gal or 130 g/L
 - 2. Abrasion Resistance, ASTM D4060
 - 1. 18 mg loss @ 1000 revolutions
 - 4. Tensile Strength, ASTM D2370
 - 1. 2,210 psi, 15,227 kPa
 - 5. Percent Elongation, ASTM D2370
 - 1. 5%
 - 6. Sward Hardness, ASTM D2134
 - 1. 35-40 (1 mil film)
 - 7. Percent Solids
 - 1. Part A 97%
 - 2. Part B 16%
 - 3. Part C 100%
 - 4. Mixed 91.5%
 - 8. Compressive Strength
 - 1. ASTM C579, 10,000 psi 69,000 Kpa
- D. Colors:
 - 1. Tennant Colors Flake: Checkerboard, Tweed, Evergreen, Storm and Tornado.

Custom blends and solid colors are also available. E. Cleaners and Related Products:

- 1. Industrial Grease Remover: Tennant Detergent
 - 1. Tennant detergents are available in a range of formulations which remove a variety of soilage.

3.01 Examination

- A. Examine concrete surface to receive floor coating system. Notify the Architect if surface is not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.
- B. Allow concrete substrate to cure a minimum of 30 days.
- C. **CHECK THE TEMPERATURE AND HUMIDITY:** Floor temperature and materials should be between 65°F (18°C) and 90°F (32°C). Humidity must be less than 80%. **DO NOT** coat unless floor temperature is more than five degrees over the dew point.
- D. CHECK FOR MOISTURE: Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. Calcium chloride testing or in-situ relative humidity testing is recommended. Readings must be below 3 pounds per 1,000 square feet over a 24-hour period on the calcium chloride test or below 70% relative internal concrete humidity. Test methods can be purchased at www.astm.org, see ASTM F1869 or F2170, respectively or follow instructions from the suppliers of these tests.

NOTE: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination from oils, chemical spills or excessive salts.

Eco-DFS™ Random

3.02 Preparation

- A. Prepare surface in accordance with manufacturer's instructions.
 - 1. Cleaning: Scrub with Tennant detergent and rinse with clean water to remove surface dirt, grease and oil.
 - 2. Preparation; Remove coatings and curing membranes and provide the required bonding profile with one of the following methods:
 - 1. Shotblasting
 - 2. Diamond Grinding

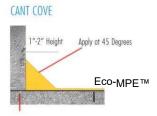
3.03 Application

- A. Apply floor coating system in accordance with manufacturer's instructions.
 - 1. Equipment: squeegees, rollers, mechanical blower and funnel for quartz application, etc.
 - 2. Coating: Eco-DFS™ -- Decorative Floor Solutions.
 - 1. Mix Eco-MPE™ components together in accordance with manufacturer's instructions.
 - 2. Mix only enough material which can be applied within 25 minutes.
 - 3. Apply Eco-MPE™ at the rate of 160-200 ft²/gal.
 - 4. Immediately broadcast decorative flake into the resin. Hand toss the flake up into the air and let it float down for an even appearance. Apply the appropriate amount to achieve the desired effect. Note: Approximately, .2 pounds per sq. ft. is used for a full flake broadcast floor.
 - 5. Allow coating to cure 8-10 hours at 75 degrees F (24 degrees C) and 50% relative humidity.
 - 3. Coating: Eco-HTS™ -- Satin Urethane Topcoat.
 - 1. Open and mix only enough material which can be applied in a 2 hour period.
 - 2. Apply Eco-HTS™ at the rate of 500 ft²/gal.
 - 3. Allow coating to dry 24 hours at 75 degrees F (24 degrees C) and 50% relative humidity.

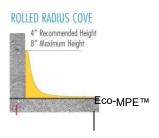
3.04 Protection

A. Close job site to traffic for a period of up to 48 hours after coating application depending on temperature and humidity

END OF SECTION



Coving, if required, shall be installed in accordance with manufacturer's instructions.



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