THE
UNIVERSITY
OF RHODE ISLAND
DIVISION OF
ADMINISTRATION
AND FINANCE

THINK BIG WE DO℠

PURCHASING DEPARTMENT
581 Plains Road, Suite 3, Kingston, RI 02881 USA p: 401.874.2171 f: 401.874.2306 uri.edu/purchasing

BID/PROPOSAL

COMMODITY: **WATERPROOF EPOXY FLOOR INSTALLATION** DATE: **10/10/2013**

FORMAL BID NO. _____ PUBLIC BID NO. **2418** RFP NO. _____

BIDS ARE TO BE RECEIVED IN URI PURCHASING DEPARTMENT BY: DATE: **10/31/2013** TIME: **3:00 PM**

BUYER: **TRACEY ANGELL/rlc** SURETY REQUIRED: YES: _____ NO: **X**

PRE-BID/PROPOSAL CONFERENCE: DATE: **10/17/2013** TIME: **10:00 AM**

MANDATORY: YES: X NO: _____

LOCATION: **URI- NARRAGANSETT BAY CAMPUS, WATKINS BLDG. ROOM # 14**
NARAGANSETT, RI 02882

BE SURE ALL INFORMATION SHOWN BELOW IS CORRECT.
FEDERAL EMPLOYER IDENTIFICATION NUMBER MUST BE INCLUDED.

COMPANY NAME: _____ FEIN: _____

STREET AND NUMBER: _____

CITY, STATE & ZIP CODE: _____

ORDERING E-MAIL ADDRESS: _____

No offer will be considered that is not accompanied by the attached University of Rhode Island Bidder Certification Form/Contract Offer completed and signed by the offeror.

Print Name and Title | Telephone Number/Facsimile Number

Signature | Date | Company F.E.I.N.

THIS BID WILL NOT BE HONORED UNLESS SIGNED

The University of Rhode Island is an equal opportunity employer committed to the principles of affirmative action.

University of Rhode Island Bidder Certification Form/Contract Offer

ALL OFFERS ARE SUBJECT TO THE REQUIREMENTS, PROVISIONS AND PROCEDURES CONTAINED IN THIS CERTIFICATION FORM/CONTRACT OFFER. Offerors are expected to read, sign and comply with all requirements. Failure to do so may be grounds for disqualification of the offer contained herein.

Rules for Submitting Offers

This Certification Form/Contract Offer must be attached in its entirety to the front of the offer and shall be considered an integral part of each offer made by a vendor to enter into a contract with the University of Rhode Island. As such, submittal of the entire Bidder Certification Form/Contract Offer, signed by a duly authorized representative of the offeror attesting that he/she (1) has read and agrees to comply with the requirements set forth herein and (2) to the accuracy of the information provided and the offer extended, is a mandatory part of any contract award.

To assure that offers are considered on time, each offer must be submitted with the specific Bid/RFP/LOI number, date and time of opening marked in the upper left hand corner of the envelope. Each bid/offer must be submitted in separate sealed envelopes.

A complete signed (in ink) offer package must be delivered to the University of Rhode Island Purchasing Office by the time and date specified for the opening of responses in a sealed envelope.

Bids must be submitted on the URI bid solicitation forms provided, indicating brand and part numbers of items offered, as appropriate. Bidders must submit detailed cuts and specs on items offered as equivalent to brands requested WITH THE OFFER. Bidders must be able to submit samples if requested.

Documents misdirected to other State locations or which are not present in the University of Rhode Island Purchasing Office at the time of opening for whatever cause will be deemed to be late and will not be considered. For the purposes of this requirement, the official time and date shall be that of the time clock in the reception area of the University of Rhode Island Purchasing Office. Postmarks shall not be considered proof of timely submission.

RIVIP SOLICITATIONS. To assure maximum access opportunities for users, public bid/RFP solicitations shall be posted on the RIVIP for a minimum of seven days and no amendments shall be made within the last five days before the date an offer is due. Except when access to the Web Site has been severely curtailed and it is determined by the Purchasing Agent that special circumstances preclude extending a solicitation due date, requests to mail or fax hard copies of solicitations will not be honored. When the result of an internet solicitation is unsuccessful, the University of Rhode Island will cancel the original solicitation and resolicit the original offer directly from vendors.

PRICING. Offers are irrevocable for sixty (60) days from the opening date (or such other extended period set forth in the solicitation), and may not be withdrawn, except with the express permission of the University Purchasing Agent. All pricing will be considered to be firm and fixed unless otherwise indicated. The University of Rhode Island is exempt from Federal excise taxes and State Sales and Use Taxes. Such taxes shall not be included in the bid price. PRICES QUOTED ARE FOB DESTINATION.

DELIVERY and PRODUCT QUALITY. All offers must define delivery dates for all items; if no delivery date is specified, it is assumed that immediate delivery from stock will be made. The contractor will be responsible for delivery of materials in first class condition. Rejected materials will be at the vendor's expense.

PREVAILING WAGE and OSHA SAFETY TRAINING REQUIREMENTS. The provisions of the State labor laws and OSHA Safety Training, including but not limited to Rhode Island General Laws §37-13-1 et seq. and §28-20-1 et seq. shall apply for all public works contracts. Prevailing wage rates are posted in the information section of the RIVIP. The RI Department of Labor and Training should be contacted for regulatory requirements.

Apprenticeship. Rhode Island General Laws §37-13-3.1 requires all general contractors and subcontractors who perform work on any public works contract awarded by the state/URI valued at One Million dollars ($1,000,000) or more shall employ apprentices required for the performance of the awarded contract. The number of apprentices shall comply with the apprentice to journeyman ratio for each trade approved by the apprenticeship council of the department of labor and training.

In addition to executing this certification, the general contractor shall be responsible for requiring that all subcontractors on the awarded project certify their compliance with R.I. Gen. Laws §37-13-3.1 prior to allowing the subcontractor to commence work on the awarded project. The general contractor shall be responsible for submitting the subcontractors' compliance certification to the University of Rhode Island Purchasing Office after the contracts are finalized between the contractor and subcontractor.

PUBLIC RECORDS. Offerors are advised that all materials submitted to the University for consideration in response to this solicitation will be considered without exception to be Public Records pursuant to Title 38 Chapter 2 of the Rhode Island General Laws, and will be released for inspection immediately upon request once an award has been made. Offerors are encouraged to attend public bid/RFP openings to obtain information; however, bid/RFP response summaries may be reviewed after award(s) have been made by visiting the Rhode Island Vendor Information Program (RIVIP) at www.purchasing.ri.gov, Bidding Opportunities +, Other RI Bid Opportunities or appearing in person at the University of Rhode Island Purchasing Office Mondays through Fridays between 8:30 am – 3:30 pm. Telephone requests for results will not be honored. Written requests for results will only be honored if the information is not available on the RIVIP.

Award will be made the to the responsive and responsible offeror quoting the lowest net price in accordance with specifications, for any individual item(s), for major groupings of items, or for all items listed, at the University's sole option.

BID SURETY. Where bid surety is required, bidder must furnish a bid bond or certified check for 5% of the bid total with the bid, or for such other amount as may be specified. Bids submitted without a required bid surety will not be considered.

SPECIFICATIONS. Unless specified "no substitute", product offerings equivalent in quality and performance will be considered (at the sole option of the University) on the condition that the offer is accompanied by detailed product specifications. Offers which fail to include alternate specifications may be deemed nonresponsive.

VENDOR AUTHORIZATION TO PROCEED. When a purchase order, change order, contract/agreement or contract/agreement amendment is issued by the University of Rhode Island, no claim for payment for services rendered or goods delivered contrary to or in excess of the contract terms and scope shall be considered valid unless the vendor has obtained a written change order or contract amendment issued by the University of Rhode Island Purchasing Office PRIOR to delivery.

Any offer, whether in response to a solicitation for proposals or bids, or made without a solicitation, which is accepted in the form of an order OR pricing agreement made in writing by the University of Rhode Island Purchasing Office, shall be considered a binding contract.

REGULATIONS, GENERAL TERMS AND CONDITIONS GOVERNING STATE AND BOARD OF GOVERNORS FOR HIGHER EDUCATION CONTRACTS. This solicitation and any contract or purchase order arising from it are issued in accordance with the specific requirements described herein, and the State's Purchasing Laws and Regulations and other applicable State Laws, including the Board of Governors for Higher Education General Terms and Conditions of Purchase. The regulations, General Terms and Conditions are incorporated into all University of Rhode Island contracts and can be viewed at: www.ribghe.org/procurementregs113006.pdf and www.purchasing.ri.gov.

ARRA SUPPLEMENTAL TERMS AND CONDITIONS. Contracts and sub-awards funded in whole or in part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto, such contracts and sub-awards shall be subject to the Supplemental Terms and Conditions for Contracts and Sub-awards funded in whole or in part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto located on the Division of Purchases website at www.purchasing.ri.gov.

EQUAL EMPLOYMENT OPPORTUNITY. Compliance certificate and agreement procedures will apply to all awards for supplies or services valued at $10,000 or more. Minority Business Enterprise policies and procedures, including subcontracting opportunities as described in Title 37 Chapter 14.1 of the Rhode Island General Laws also apply.

PERFORMANCE BONDS. Where indicated, successful bidder must furnish a 100% performance bond and labor and payment bond for contracts subject to Title 37 Chapters 12 and 13 of the Rhode Island General Laws. All bonds must be furnished by a surety company authorized to conduct business in the State of Rhode Island. Performance bonds must be submitted within 21 calendar days of the issuance of a tentative notice of award.

DEFAULT and NON-COMPLIANCE Default and/or non-compliance with the requirements and any other aspects of the award may result in withholding of payment(s), contract termination, debarment, suspension, or any other remedy necessary that is in the best interest of the state.

COMPLIANCE Vendor must comply with all applicable federal, state and local laws, regulations and ordinances.

Effective January 1, 2013 all *public works project* related bids or proposals exceeding FIVE HUNDRED THOUSAND ($500,000) DOLLARS are required to include a "public copy". All agency contract solicitations, requests for proposals, invitations for bids, etc., shall state that any bid or proposal that exceeds FIVE HUNDRED THOUSAND ($500,000) DOLLARS must include a copy to be available for public inspection upon the opening of the bids. Any bid or proposal in excess of FIVE HUNDRED THOUSAND ($500,000) DOLLARS which does not include a copy for public inspection shall be deemed to be non-responsive. For further information, please see R.I. Gen. Laws §37-2-18(j) and State of Rhode Island Procurement Regulations at http://purchasing.ri.gov/rulesandregulations/rulesandregulations.aspx.

ALL CONTRACT AWARDS ARE SUBJECT TO THE FOLLOWING DISCLOSURES & CERTIFICATIONS
Offerors must respond to every disclosure statement. A person authorized to enter into contracts must sign the offer and attest to the accuracy of all statements. Incomplete certification forms are grounds for disqualification of offer.

You MUST answer 'Yes' or 'No' to the following questions:

____1 State whether your company, or any owner, stockholder, officer, director, member, partner, or principal thereof, or any subsidiary or affiliated company, has been subject to suspension or debarment by any federal, state, or municipal government agency, or the subject of criminal prosecution, or convicted of a criminal offense with the previous five (5) years. If so, then provide details below.

____2 State whether your company, or any owner, stockholder, officer, director, member, partner, or principal thereof, or any subsidiary or affiliated company, has had any contracts with a federal, state or municipal government agency terminated for any reason within the previous five (5) years. If so, then provide details below.

____3 State whether your company or any owner, stockholder, officer, director, member, partner, or principal thereof, or any subsidiary or affiliated company, has been fined more than $5000 for violation(s) of Rhode Island environmental laws by the Rhode Island Department of Environmental Management within the previous five (5) years. If so, then provide details below.

____4 I/we certify that I/We will immediately disclose, in writing, to the University Purchasing Agent any potential conflict of interest which may occur during the course of the engagement authorized pursuant to this contract.

____5 I/we acknowledge that, in accordance with (1) Chapter §37-2-54(c) of the Rhode Island General Laws "no purchase or contract shall be binding on the state or any agency thereof unless approved by the Department [of Administration] or made under general regulations which the Chief Purchasing Officer may prescribe," and (2) RIGL section §37-2-7(16) which identifies the Board of Governors for Higher Education as a public agency and gives binding contractual authority to the University Purchasing Agent, including change orders and other types of contracts and under State Purchasing Regulation 8.2.1.1.2 any alleged oral agreement or arrangements made by a bidder or contractor with any agency or an employee of the University of Rhode Island may be disregarded and shall not be binding on the University of Rhode Island.

____6 I/we certify that I or my firm possesses all licenses required by Federal and State laws and regulations as they pertain to the requirements of the solicitation and offer made herein and shall maintain such required license(s) during the entire course of the contract resulting from the offer contained herein and, should my/our license lapse or be suspended, I/we shall immediately inform the University of Rhode Island Purchasing Agent in writing of such circumstance.

____7 I/we certify that I/we will maintain required insurance during the entire course of the contract resulting from the offer contained herein and, should my/our insurance lapse or be suspended, I/we shall immediately inform the University of Rhode Island Purchasing Agent in writing of such circumstance.

____8 I/we certify that I/we understand that falsification of any information herein or failure to notify the University of Rhode Island Purchasing Agent as certified herein may be grounds for suspension, debarment and/or prosecution for fraud.

____9 I/we acknowledge that the provisions and procedures set forth in this form apply to any contract arising from this offer.

____10 I/we acknowledge that I/we understand the State's Purchasing Laws (§37-2 of the General Laws of Rhode Island) and Purchasing Regulations and General Terms and Conditions available at the Rhode Island Division of Purchases Website (http://www.purchasing.ri.gov) and the Board of Governors Website (www.ribghe.org/procurementregs113006.pdf) apply as the governing conditions for any contract or purchase order I/we may receive from the University of Rhode Island, including the offer contained herein.

____11 NEW REVISED REQUIREMENT*-IMPORTANT!! I/we hereby acknowledge that I/we understand that effective January 1, 2013 all public works project related bids or proposals exceeding FIVE HUNDRED THOUSAND ($500,000) dollars, inclusive of all proposed alternates, must include a "public copy" as required by R.I. Gen. Laws §37-2-18(j) and the State Procurement Regulations. It is further understood that any bid or proposal in excess of FIVE HUNDRED THOUSAND ($500,000) dollars which does not include a copy for public inspection shall be deemed to be non-responsive.

____12 I/we certify that the above information is correct and complete.

IF YOU HAVE ANSWERED "YES" TO QUESTIONS #1 – 3 OR IF YOU ARE UNABLE TO CERTIFY YES TO QUESTIONS #4 – 12 OF THE FOREGOING, PROVIDE DETAILS/EXPLANATION IN AN ATTACHED STATEMENT. INCOMPLETE CERTIFICATION FORMS SHALL BE GROUNDS FOR DISQUALIFICATION OF OFFER.

Signature below commits vendor to the attached offer and certifies (1) that the offer reflects all solicitation amendments (2) that the above statements and information are accurate and that vendor understands and has complied with the requirements set forth herein.

Vendor's Signature:_____ Bid Number:_____ Date:_____
(Person Authorized to enter into contracts; signature must be in ink) (if applicable)

_____
Print Name and Title of Company official signing offer Telephone Number

COMMODITY: WATERPROOF EPOXY FLOOR INSTALLATION
OPENING DATE & TIME: 10/31/13 3:00 PM

SHIP TO:
UNIVERSITY OF RHODE ISLAND
NARRAGANSETT BAY CAMPUS
WATKINS BUILDING ROOM 14
NARRAGANSETT, RI 02882

BIDDER (NAME OF FIRM)

BID NO: 2418

BIDDER (NAME OF FIRM)

BID NO: 2418

ATTACHMENT "A"

ITEM NO.	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	ITEM NO.

INSTRUCTIONS:

IF BIDDING ON ANY ITEM, THE ENTIRE BID MUST BE RETURNED. THE PRICE COLUMN ON THE RIGHT WILL BE DETACHED TO CREATE A BID TABULATION SPREAD SHEET FOR THE "OFFICIAL BID ANALYSIS", THEREFORE:

A. VENDOR NAME MUST APPEAR IN BOTH COLUMNS ON "EVERY" PAGE UNDER THE WORDS "BIDDER"

B. PRICE COLUMNS MUST CONTAIN "EXACTLY" THE SAME INFORMATION.

C. ANY SUPPLEMENTARY INFORMATION MUST BE REPEATED IN "BOTH" COLUMNS.

D. TO ASSURE THAT OFFERS ARE CONSIDERED ON TIME, EACH OFFER MUST BE SUBMITTED WITH SPECIFIC BID/RFP NUMBER (PROVIDED ABOVE), DATE AND TIME OF OPENING MARKED IN THE UPPER LEFT HAND CORNER OF ENVELOPE. EACH BID/ OFFER MUST BE SUBMITTED IN SEPARATE SEALED ENVELOPES:

MAIL TO:	COURIER:
UNIVERSITY OF RHODE ISLAND	UNIVERSITY OF RHODE ISLAND
P.O. BOX 1773	PURCHASING DEPARTMENT
PURCHASING DEPARTMENT	DINING SERVICES DISTRIBUTION CENTER
PLAINS ROAD	581 PLAINS ROAD
KINGSTON, RI 02881	KINGSTON, RI 02881-2010

DOCUMENTS MISDIRECTED TO OTHER STATE LOCATIONS OR WHICH ARE NOT PRESENT IN THE UNIVERSITY OF RHODE ISLAND PURCHASING DEPARTMENT AT THE TIME OF OPENING FOR WHATEVER CAUSE WILL BE DEEMED TO BE LATE AND WILL NOT BE CONSIDERED. FOR THE PURPOSE OF THIS REQUIREMENT, THE OFFICIAL TIME AND DATE SHALL BE THAT OF THE TIME CLOCK IN THE UNIVERSITY OF RHODE ISLAND PURCHASING DEPARTMENT. POSTMARKS SHALL NOT BE CONSIDERED PROOF OF TIMELY SUBMISSION.

FAILURE TO COMPLETE FORM AS INSTRUCTED MAY BE GROUNDS FOR "DISQUALIFICATION".

GROUP PURCHASING ORGANIZATIONS (GPO):
THE UNIVERSITY OF RHODE ISLAND IS A MEMBER OF THE FOLLOWING:
1) Educational & Institutional Cooperative Purchasing (E&I)
2) Provista

1	**WATERPROOF EPOXY FLOOR IN ROOM 14 , WATKINS BLDG.** **NARRAGANSETT BAY CAMPUS SMART LABORATORY** **PER THE ATTACHED SPECIFICATIONS**	1	TOT		$_____		$_____	1

COMMODITY: WATERPROOF EPOXY FLOOR INSTALLATION
OPENING DATE & TIME: 10/31/13 3:00 PM

SHIP TO:
UNIVERSITY OF RHODE ISLAND
NARRAGANSETT BAY CAMPUS
WATKINS BUILDING ROOM 14
NARRAGANSETT, RI 02882

BIDDER (NAME OF FIRM)

BID NO: 2418

BIDDER (NAME OF FIRM)

BID NO: 2418

ATTACHMENT "A"

ITEM NO.	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	ITEM NO.

PREVAILING WAGE

BIDDERS ARE ADVISED THAT ALL PROVISIONS OF TITLE 37 CHAPTER 13 OF THE GENERAL LAWS OF RHODE ISLAND APPLY TO THE WORK COVERED BY THIS REQUEST AND THAT PAYMENT OF THE GENERAL PREVAILING RATE OF PER DIEM WAGES AND THE GENERAL PREVAILING WAGE RATE FOR REGULAR, OVERTIME AND OTHER WORKING CONDITIONS EXISTING IN THE LOCALITY FOR EACH CRAFT, MECHANIC, TEAMSTER, OR TYPE OF WORKMAN NEEDED TO EXECUTE THIS WORK IS A REQUIREMENT FOR BOTH CONTRACTORS AND SUBCONTRACTORS.

WAGE DETERMINATION ONLINE GOV
WWW.WDOL.GOV/DBA/ASPX#0 PROVIDING PUBLIC ACCESS TO FEDERAL WAGE DETERMINATIONS AND RELATED INFORMATION.

"THIS THIRD-PARTY LINK WWW.WDOL.GOV/DBA.ASPX#0 IS PROVIDED AS A COURTESY TO POTENTIAL VENDORS FOR GUIDANCE PURPOSES ONLY. THE UNIVERSITY OF RHODE ISLAND IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION CONTAINED ON THIS WEBSITE OR ANY THIRD-PARTY WEBSITE. ANY AND ALL VENDORS SUBMITTING PROPOSALS IN RESPONSE TO THIS SOLICITATION BEAR THE SOLE RESPONSIBILITY AND BURDEN TO SUBMIT PROPOSALS THAT ARE BASED ON ACCURATE INFORMATION AND ARE IN COMPLIANCE WITH LAW"

BIDDERS NOTE:
IN THE EVENT THAT THIS BID SPECIFIES PRICE OFFERS ON A TIME AND MATERIALS BASIS, I.E. AN HOURLY RATE, ANY OR ALL BIDS SUBMITTED IN AN AMOUNT LESS THAN THE PREVAILING RATE IN EFFECT FOR THE WORK COVERED BY THIS REQUEST AS OF THE DATE OF BID ISSUANCE SHALL BE REJECTED BY THE UNIVERSITY PURCHASING DEPT.

INSURANCE

IN ACCORDANCE WITH THE BOARD OF GOVERNORS (BOG) FOR HIGHER EDUCATION GENERAL CONDITIONS OF PURCHASE, INSURANCE CERTIFICATES ARE REQUIRED FOR WORKERS COMPENSATION, GENERAL LIABILITY, PROPERTY DAMAGE AND AUTO INSURANCE. UPON NOTICE OF TENTATIVE AWARD, THE SUCCESSFUL BIDDER(S) WILL BE REQUIRED TO SUBMIT THE ABOVE NAMING THE RHODE ISLAND BOARD OF GOVERNORS FOR HIGHER EDUCATION, THE UNIVERSITY OF RHODE ISLAND, AND THE STATE OF RHODE ISLAND AS ADDITIONAL INSURED, BY A FIRM AUTHORIZED TO DO BUSINESS IN THE STATE OF RHODE ISLAND.

COMMODITY: WATERPROOF EPOXY FLOOR INSTALLATION
OPENING DATE & TIME: 10/31/13 3:00 PM

SHIP TO:
UNIVERSITY OF RHODE ISLAND
NARRAGANSETT BAY CAMPUS
WATKINS BUILDING ROOM 14
NARRAGANSETT, RI 02882

BIDDER (NAME OF FIRM)

BID NO: 2418

BIDDER (NAME OF FIRM)

BID NO: 2418

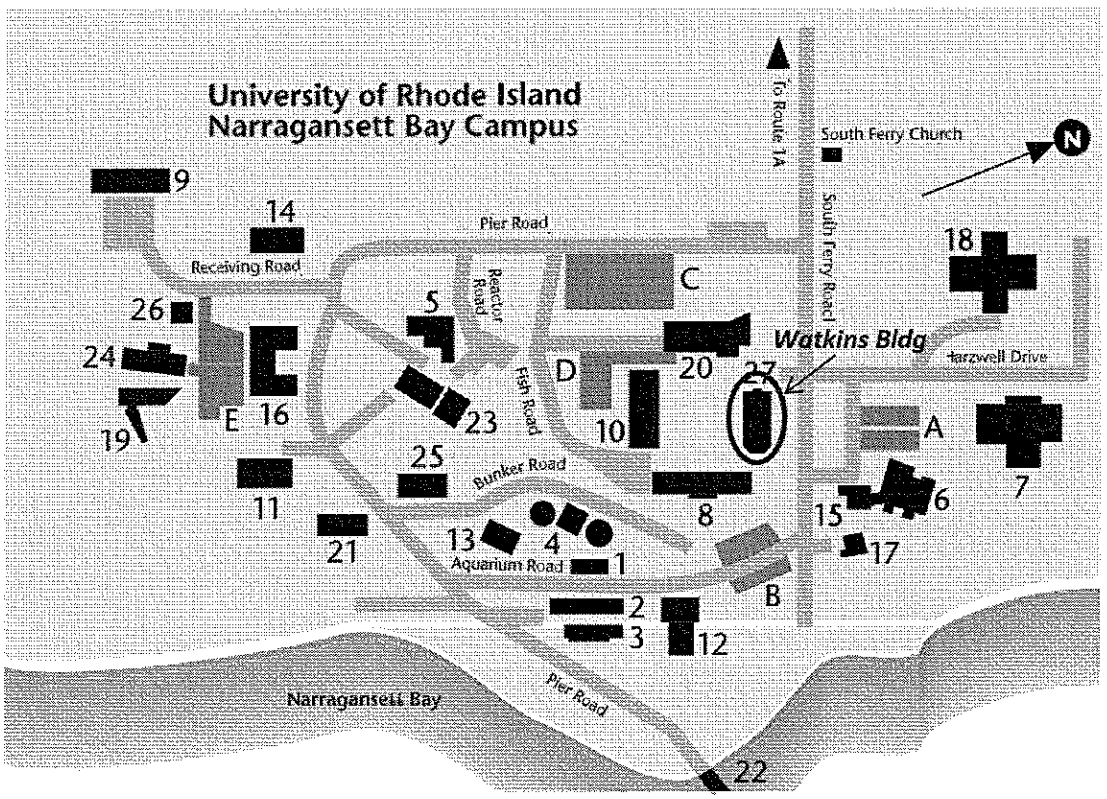
ATTACHMENT "A"

ITEM NO.	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	ITEM NO.
	MEASUREMENTS BIDDERS ARE RESPONSIBLE FOR INSPECTION OF EQUIPMENT AND/OR LOCATION, TAKING MEASUREMENTS WHEN REQUIRED AND MAKING THEMSELVES AWARE OF THE TOTAL REQUIREMENTS BEFORE SUBMITTING A BID. MEASUREMENTS PROVIDED WITH THE BID ARE FOR REFERENCE PURPOSES AND ARE NOT GUARANTEED TO BE COMPLETELY ACCURATE.							

Statement of Work
for
New Epoxy Floor
Watkins Lab Room 14

Location:

Watkins Research Laboratory
Narragansett Bay Campus
University of Rhode Island
Graduate School of Oceanography
Narragansett, RI 02882



Requirements:

Watkins Room 14:

Vendor will supply all labor, tools, equipment and materials to install approximately 400 square feet of Koester VAP 1 2000 epoxy waterproof floor system* with 4" epoxy cove base in Watkins Room 14.

Vendor will perform necessary sub-floor preparations as specific below and per attached Koster manufacturer's recommendations:

-Vendor will rout out all existing cracks in concrete floor.
-Vendor will shot-blast and dustless diamond grind concrete floor to ensure proper adhesion of waterproofing membrane.

Installation shall be as specified below and per attached Koster manufacturer's instructions:

-seamless for entire room
-apply first layer of epoxy flooring at rate of 100 square feet per gallon and broadcast with colored quartz
-apply second layer of epoxy flooring and broadcast with colored quartz
-apply two finish coat layers of clear epoxy
-apply one finish topcoat of clear urethane that is chemical resistant with UV block.

*** Any requests for product substitutions must be submitted by 10/18/13 at 3:00PM to URIPurchasing@uri.edu . Acceptable products will be approved via an addendum to the bid.**

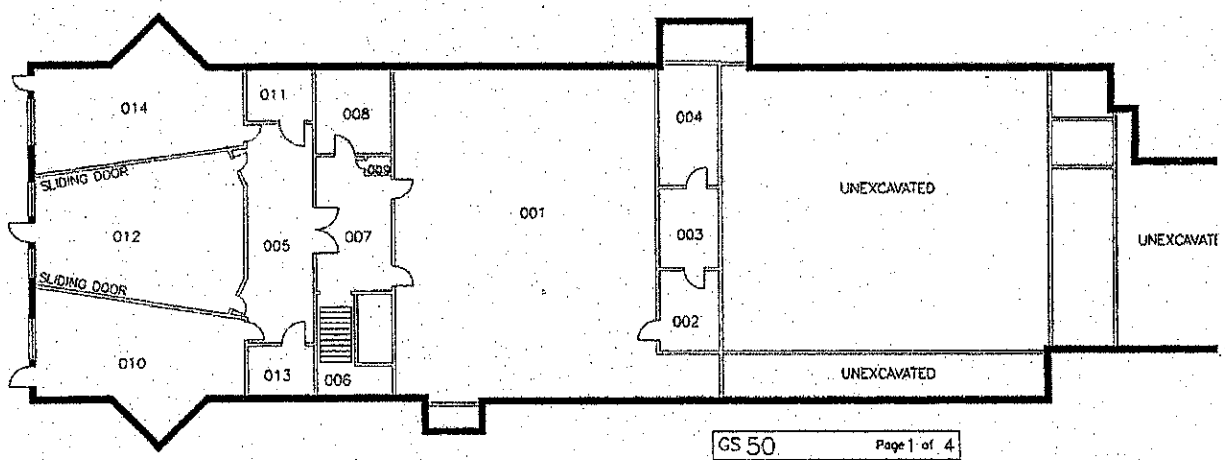
Vendor to dispose of all materials according to all Local, State and Federal regulations.

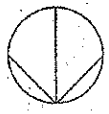
This is an active classroom facility. Vendor is responsible for control of dust migration and daily and final clean-up of work site.

Project Manager:

David Palazzetti
NBC Facilities and Operations
401-741-2282
djpalazzetti@mail.uri.edu

Watkins
Basement





25 Feet

GS 50 Page 1 of 4
WATKINS BUILDING
Building # 1350
BASEMENT FLOOR Date: 7/3/96
Property Office
University of Rhode Island
Kingston, Rhode Island
Drawn by: ANIL Checked by:

KOSTER™
Waterproofing Systems
Quality Worldwide
Koester American Corp.

KOESTER VAP 1® 2000
Specification
Section 09699

A SYSTEM FOR THE REDUCTION OF MOISTURE VAPOR EMISSION AND ALKALINITY CONTROL

Description:

The KOESTER VAP 1® 2000 is a one-coat system which consists of a unique combination of epoxy resins and other chemical substances. It is specifically formulated to overcome the poor long-term adhesion properties of most resin-based systems when curing in an environment of constant wetness, extreme alkalinity (pH 13–14) and water vapor drive. Because of its extreme density it is capable of reducing water vapor and moisture to levels acceptable for most coatings, adhesives and floor covering systems. (See Law Engineering test results.) The KOESTER VAP 1® 2000 is in full compliance with VOC regulations.

The KOESTER VAP 1® 2000 SYSTEM has excellent chemical and abrasion resistance and is compatible with most 100% solid epoxy and/or polyurethane based materials. ALWAYS TEST ADHESION PROPERTIES OF MATERIALS TO BE APPLIED ONTO VAP 1® 2000 PRIOR TO APPLICATION.

Before application of any material onto the KOESTER VAP 1® 2000 SYSTEM, allow final coating to cure for a minimum period of 12 hours. This cure time is based on proper ventilation of entire work area during and after application. (See "environmental conditions.")

Uses:

The primary recommended use for the KOESTER VAP 1® 2000 SYSTEM is to solve the problems of alkalinity and moisture/water vapor emission through mineral-based substrates like concrete floors, floor underlayments (not containing gypsum), screeds etc., by reducing these vapors to levels that do not interfere with the adhesion of floor coverings. It provides an excellent base coat for most coatings and adhesives that cures fast and can be used indoors due to its low odor and no flammability. The KOESTER VAP 1® 2000 SYSTEM can be applied to concrete and other cement-based toppings that have been allowed to cure for a minimum period of 7 days. It is not pH sensitive in an alkaline environment. These unique properties allow the system to provide a solution as a base coat to pH/moisture/water vapor-sensitive coatings like polyurethane with regard to their long-term adhesion. It enables their application on relatively fresh cement-based substrates. Since conditions vary from job to job, it is recommended that a test area be coated and tested for water vapor transmission to assure proper performance of the system.

The KOESTER VAP 1® 2000 SYSTEM is best used in an environment protected from UV rays and extreme thermal movement of the substrate. It is not a low modulus material and therefore cannot accommodate substrate movement commonly encountered in an outdoor environment. This limitation applies specifically to cracks. Cracks have to be repaired according to manufacturer's recommendation prior to the application of the KOESTER VAP 1® 2000 SYSTEM. (Contact manufacturer for details.) Substrate should have a minimum compressive strength of 2500 psi.

Surface Preparation:

The substrates to receive the KOESTER VAP 1® 2000 SYSTEM have to be sound, clean, ABSORPTIVE and meet acceptable industry standards as defined in ACI Committee 201 report "Guide to Durable Concrete." Any kind of surface contamination like adhesives, coatings, curing compounds, efflorescence, dust, grease, oils, etc., have to be removed completely by sand or shot blasting to ICRI CSP 3 - 4 finish. However, for hard-trowled surfaces like aircraft hangers, blast to ICRI CSP-5. Smooth formed concrete surfaces like precast panels must be roughened if not absorptive to allow the KOESTER VAP 1® 2000 SYSTEM to penetrate. Acid etching or grinding as surface preparation is not recommended.

In the event that surfaces are very uneven or have a rough texture, the use of a leveling underlayment might be beneficial. Consult with KOESTER AMERICAN first before using underlayment / repair mortars / screeds. It is essential that these materials are suitable for the use underneath vapor-reducing systems. Test adhesion properties first before application. DO NOT apply KOESTER VAP 1® 2000 onto surfaces that have been treated with any kind of concrete sealer prior to consulting with KOESTER AMERICAN CORPORATION. First make sure that the substrate surface does not deteriorate due to the presence of alkaline silica reactive substances or sulphurous compounds encountered in certain areas. Testing for concrete deficiencies and contaminates like A.S.R. (Alkaline Silica Reaction), un-reacted silicates, organic residue etc. is the responsibility of the Building Owner, and strongly recommended by Koester to avoid product failures.

Koester American Corp. strongly advises that surfaces to be treated with Koester material be inspected and evaluated by an experienced firm prior to the application of Koester Systems to determine its suitability to receive the VAP 1® System.

ONLY a surface that REMAINS sound, clean, absorptive and free of any type of contamination is fit to receive the KOESTER VAP 1® 2000 SYSTEMS.

If self-leveling underlayments are to be used for any reason, ALWAYS APPLY KOESTER'S VAP 1® LEVEL-PRO SELF-LEVELING UNDERLAYMENT with LEVEL-PRO PRIMER E ON TOP OF KOESTER VAP 1® 2000 SYSTEMS. Consult with KOESTER AMERICAN first before using underlayments / repair mortars / and screeds. Always follow underlayment manufacturers instructions and specifications.

ASTM E96-95 TEST RESULTS
KOESTER AMERICAN CORPORATION / KOESTER COATING

	VAP 1 2000 Wet Method (See Note)	CONTROL Wet Method (See Note)
Water Vapor Transmission, grains/hr.ft2	0.20	3.35
Water Vapor Transmission, grains/m2	0.14	2.34
Water Vapor Transmission, lbs./24hr. 1000 ft.	0.69	11.48
Permance, perms	0.53	8.81
Permance, g/Pa.s.m2	3.09E-08	5.04E-07

Law Project Number: 50160-0-3481.01.83 April 10, 2003

Application Instructions:

Before application of the KOESTER VAP I® 2000 SYSTEM, make sure that all conditions as outlined for uses, surface preparation and mixing have been strictly adhered to.

The KOESTER VAP I® 2000 System can be applied using a squeegee and/or 3/8" nap roller application. The coverage rates for the VAP 1® System depend on the surface texture and porosity of the substrate as well as the degree of moisture level. The KOESTER VAP I® 2000 SYSTEM is self-leveling and has the tendency to run into low areas where it can build up. Therefore it is recommended to start with a trial area of application to determine final coverage. On average, coverage of 90 to 140 sq. ft./gal. can be expected, but can vary from project to project.

Approximate Suggested Coverages

Up to 10 lbs./1000 ft._ /24h. 130 sq. ft./gal.
Up to 15 lbs./1000 ft._ /24h. 100 sq. ft./gal.
Up to 25 lbs./1000 ft._ /24h. 70 sq. ft./gal.

When applied onto absorptive concrete, the KOESTER VAP I® 2000 SYSTEM will penetrate deep into the voids of the substrate surface. This can result in the appearance of "outgasing" by displacing the air contained in the voids with resin. Extensive testing has shown that this "outgasing" does NOT affect the vapor performance of the system. This displacement may result in high points which can be removed with a razor scraper or very light disc sanding. Pinholes can be filled with floor adhesive or epoxy putty. All "outgasing channels" are self-sealed during curing of the system.

If this "displacement / outgasing" is of issue with the flooring installation, apply one coat of KOESTER VAP I® PRIMER at a coverage rate of 250 sq. ft./gal. and wait a minimum of 6 to 12 hours before the application of the KOESTER VAP I® 2000. After the KOESTER VAP 1® 2000 has cured for a minimum of 12 hours, the subsequent flooring systems can be installed. KOESTER VAS Adhesives can be used directly onto the VAP 1® 2000 and carry with them the full ten-year warranty.

Mixing:

Mix Component A and B at a rate of 2.4:1 by volume and pour onto the substrate immediately after mixing.

Material Properties:

Pot Life:	Immediately empty container after mixing
Solid Content:	100 %
VOC, Mixed (lbs./gal.):	< 10 gr./L
Flash Point:	>200°

Packaging: 6 gallon, 2.4 gallon .72 gal. Combi-Pac

Storage: Between 50–90°F.

Shelf Life: 1 year in original sealed container

Clean Up: Immediately with Xylene after use

Disposal: Dispose of in accordance with current local, state and federal regulations. Collect with absorbent material.

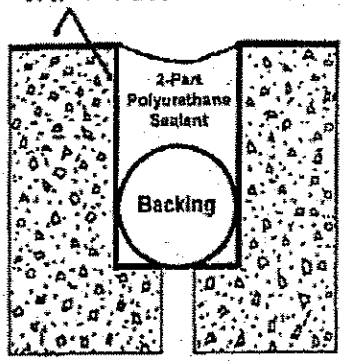
Safety Precautions:

Component A contains epoxy resins. Component b contains amines. Avoid skin and eye contact as well as prolonged exposure to vapors. Use safety goggles and chemical-resistant gloves. Ventilate work area properly. Use NOISH/MSHA approved vapor respirator.

First Aid: *Eye Contact — Flush immediately with water and consult physician*

Skin Contact — Wash immediately with soap and water

Cracks/Expansion Joints
VAP I® 2000



Allow VAP1® 2000 to cure a minimum of 24 hours, before applying backing and sealant.

Environmental Conditions:

The KOESTER VAP I® 2000 SYSTEM must be applied at ambient and substrate temperatures between 50 and 90 degrees F. (10°C. and 32. 2°C.). The relative humidity must not exceed 80%.

IN ORDER TO AVOID ENTRAPMENT OF VOLATILE COMPONENTS USE SOLVENT /WATER-FREE ADHESIVES ONLY (100% SOLIDS). Koester VAS Adhesives are formulated for use directly over the VAP 1® System to create a single source 10-year warranty. A thorough examination of all areas with the KOESTER VAP I® 2000 SYSTEM must take place prior to subsequent applications of coating or other coverings. If necessary, imperfections like pinholes, inadequate Coat thickness can be touched up with a second application of the Coating, allowing the first coat to cure for a minimum of 12 hours.

Maximum recoat time (adhesives included) is 5 days.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY
READ MATERIALS SAFETY DATA SHEET BEFORE USING
EMERGENCY RESPONSE: Infotrac 800-535-5053

Warranties:

LIMITED WARRANTY: KOESTER AMERICAN CORPORATION ("KOESTER") warrants that its products shall be in accordance with their published specifications and covenants that, in the event any of its products fail to meet their published specifications or their published performance standards (subject to published conditions such as proper application and surface preparation), KOESTER shall replace those products proved defective, but KOESTER shall not be responsible for consequential damages due to the breach of its warranties. Notwithstanding the foregoing, KOESTER's liability hereunder shall not exceed one and one-half (1 1/2) times the cost of the defective product originally purchased. EXCEPT AS SET FORTH ABOVE, KOESTER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AND MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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Section 09699

Water Vapor Emission Control Systems

Part 1 – General

1.1 RELATED DOCUMENTS

A. Drawings, documents, and general provisions of the Contract, including, but not necessarily limited to, General Conditions and Division 1 Specification Sections, apply to this Section.

B. Related Sections- Coordinate work of this Section with work of other Sections to properly execute the work requirements and maintain satisfactory progress of work in other Sections.

1. Section 03300:	Cast-In Place Concrete Installation and curing requirements according to ACI 302.
2. Section 09620:	Specialty Flooring, Installation requirement.
3. Section 09640:	Wood Flooring, Installation requirement.
4. Section 09650:	Resilient Flooring, rubber sheet and vinyl tile installation requirements.
5. Section 09660:	Static Control Flooring, Installation requirements.
6. Section 09670:	Fluid Applied Flooring, Installation requirements.
7. Section 09680:	Carpet, Installation requirements.

1.2 SUMMARY

A. This Section includes the furnishing, testing, and application of systems for the reduction of moisture vapor transmission and alkalinity control for interior concrete slabs requiring the installation of VCT, vinyl flooring, rubber flooring, wood, carpet, and/or epoxy flooring systems.

1.3 SUBMITTALS

A. General: Submit each item in this Article according to the, requirements and Conditions of the Contract in Division 1. Specification Sections.

B. Product data for each type of product and process specified, which shall include:
1. Manufacturer's Specification
2. Installation Instructions
3. Independent Test Data
4. Certification Requirements
5. Warranty Information

C. Submit anhydrous calcium chloride testing according to ASTM F 1869-98 that shall be performed by the Owner's Special Inspector to the Architect, Owner, General Contractor, and Water Vapor Reduction System Manufacture's Representative.

1.4 QUALITY ASSURANCE

A. Qualifications of Applicator

1. Employ an Applicator currently approved by the manufacturer, experienced In surface preparation and application of the material and subject to inspection and control of the manufacturer.

2. Installer shall have no less than five (5) years experience installing the fluid based coating systems.

B. Manufacturer's Qualifications

1. Manufacturer shall have no less than five (5) years experience in manufacturing water vapor reduction systems. The water vapor reduction system must be specifically formulated and marketed for water vapor reduction and alkalinity control without change of system design for a minimum period of five (5) years.

2. Manufacturer shall provide the Owner with their standard ten (10) year warranty at no additional cost. Applicator of water vapor reduction system shall provide standard installation warranty for workmanship.

3. Manufacturer must provide Independent lab test reports documenting performance per the following:

   a. ASTM E 96, Water Vapor Transmission (wet methods) Performance shall be documented by an independent testing laboratory at a minimum of 90% for Koester VAP I 2000 System, water vapor transmission reduction compared to untreated concrete.
   b. ASTM D 1308; Insensitivity to alkaline environment up to pH 14.
   c. Certify acceptance and exposure to continuous topical water exposure after final cure.

4. Submit list of product use and performance history, for the same formulation and system design, listing reference sources. Similar projects shall have documented minimum initial water vapor transmission rates of 15 lbs per 1000 ft_ per 24 hours to 3lbs per 1000 ft_ per 24, and have resulted in maintained water vapor reduction rate of less than 3 lbs per 1000 ft_ per 24 hours when tested according to ASTM 1869.98.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver products to the job site in their original unopened containers, clearly labeled with the manufacturer's name and brand designation.

B. Store products in an approved ventilated dry area; protect from dampness, freezing, and direct sun light. Product should not be stored in areas with temperatures in excess of 90 °F or below 50 °F.

C. Handle product in a manner that will prevent breakage of containers and damage products.

1.6 PROJECT/SITE CONDITIONS

A. ENVIRONMENTAL CONDITIONS

1. Do not apply moisture vapor reduction system to unprotected surfaces or when water is accumulated on the surface of the concrete.

2. Do not apply water vapor reduction system when temperature is lower than 50° F or expected to fall below this temperature within 24 hours from time of application.

3. Allow continuous ventilation and indirect air movement at all times during application and curing process of the water vapor reduction system.

B. Protection: Protect water vapor reduction system to prevent damage from active rain or topical water for a minimum period of 24 hours from time of application.

1.7 SCHEDULING

A. Before installation of VCT, sheet vinyl, rubber flooring, wood, carpet and/or epoxy flooring systems over the interior concrete slabs, anhydrous calcium chloride testing shall be performed as per ASTM F 1869-98 by the Owner's Special Inspector as outlined in Article 3.1 below to determine the level of water vapor transmission in the slab and the type of moisture vapor reduction system required.

B. The Owner's Special Inspector will coordinate with the Owner scheduling water vapor reduction system testing and allowing enough time to test, submit and install the water vapor reduction system before installation of floor finish.

C. The Owner's Special Inspector will allow for as much time as is reasonable for the concrete slab to dry before installing anhydrous calcium chloride tests. All mastics, glues, and/or contaminants shall be removed to provide a clean, sound, concrete substrate prior to installing anhydrous calcium chloride tests as per ASTM F 1869-98. No Exceptions!

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. Water vapor reduction system, which may be incorporated in the work, shall be the product of a single manufacturer, no substitutions. Manufacturer's offering approved products such as:

1. Koester VAP I 2000 System by Koester American Corporation; Corporate Headquarters: (757) 425-1206. Western Regional Office: (541) 548-0210.

B. Terminology hereafter is based upon the products of Koester American Corporation.

2.2 MATERIALS

A. General: Use materials of one manufacturer throughout the project as hereinafter specified.

B. 100 % solids VAP I 2000 coating, containing specifically formulated chemicals and resins to provide the following characteristics and properties.

1 ASTM E 96, Water Vapor Transmission (wet methods) Performance shall be documented by an independent testing laboratory at a minimum 90% for Koester VAP I 2000 System water vapor transmission reduction compared to untreated concrete.
2 ASTM D 1308; Insensitivity to alkaline environment up to pH 14.
3 Certify acceptance and exposure to continuous topical water exposure after final cure.

2.3 KOESTER VAP I 2000 SYSTEM

A. This one (1) coat system consists of one (1) coat of VAP I 2000 coating to be applied to a properly prepared concrete surface. Anhydrous calcium chloride testing performed by the Owner's Special Inspector having water vapor transmission levels greater then 3 lbs/24hrs per 1000/sf. and less then 25 lbs/24 hrs per 1,000/sf. (depending on individual conditions) shall determine where this system is utilized and the coverage rates required. The Owner shall specify a floor covering system and adhesive having the ability to withstand water vapor transmission levels up to 3 lbs/ 24 hrs per 1000/sf. The water vapor reduction system shall be required to reduce vapor emissions by a minimum of 90% after final cure. Verify water vapor reduction by anhydrous calcium chloride testing according to ASTM F 1869-98 prior to proceeding with any floor covering installation.

2.4 KOESTER VAP I 2000

A. System consists of one (1) coat of VAP I 2000. Anhydrous calcium chloride testing according to ASTM F 1869 – 98 performed by the Owner's Special Inspector having water vapor transmission levels greater than 3 lbs./ 24 hrs per 1000/sf. and less than 25 lbs/24 hours per 1000/ sf (depending on individual conditions) shall determine where this system is utilized and the coverage rates required. The Owner shall specify a floor covering system and adhesive having the ability to withstand water vapor transmission levels up to 3lbs/24hrs per 1000/sf. The water vapor reduction system shall be required to reduce water vapor emissions by a minimum of 90% after final cure, as well as alkalinity reduction to acceptable pH levels. Verify water vapor reduction by anhydrous calcium chloride testing prior to proceeding with any floor covering installation.

2.5 AREA NOT REQUIRING VAPOR REDUCTION SYSTEM

A. Anhydrous calcium chloride testing performed by the Owner's Special Inspector for interior concrete slab areas receiving VCT, sheet vinyl, rubber flooring, wood, carpet, and or epoxy flooring systems will determine where this system might be required. Water vapor reduction system might be required on concrete floors with water vapor transmission level in excess of 3 lbs/24 hrs per 1,000 sf. or 5 lbs for some specific flooring systems verify with flooring system manufacturer.

B. Water vapor reduction system is not required on Interior concrete slabs without floor finishes.

2.6 MIX DESIGNS

A. Use clean containers and mix thoroughly as per Manufacturer's requirements to obtain a homogeneous mixture. Use a low speed motor less than 400 rpm and a two bladed Jiffy mixing blade only. DO NOT AERATE. Mix ratios are measured by volume.

B. VAP I 2000 Mix Ratio: Mix Component A and B at a ratio of 2.4:1 by volume.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Calcium Chloride test requirements:

1. Anhydrous calcium chloride testing shall be performed by the Owner's Special Inspector as outlined in Section 01410 - Quality Requirements.
2. Provide anhydrous calcium chloride tests according ASTM F 1869 - 98 In accordance to all surface preparation methods outlined. Tests shall be installed onto freshly abraded contaminant free concrete. No exceptions!
3. Only conduct calcium chloride tests at the same temperature and humidity expected during normal use. If this is not possible, then the test conditions should be 75°F +-10°F and 50+-10% relative humidity. Maintain these conditions 48 hours prior to and during tests. Water vapor transmission levels are directly affected by ambient room temperature and readings conducted without a sustained ambient temperature are NOT acceptable.
4. Owner's Special Inspector shall provide test results with a marked up floor finish plan showing test results. Owner's Special Inspector shall provide a written clarification on status of the ambient air temperature and humidity before and during the testing procedures.
5. Owner's Special Inspector shall provide a marked up floor plan showing areas with vapor reduction system recommendations.

B. Initial calcium chloride tests:

1. Before installation of VCT, sheet vinyl, rubber flooring, wood, carpet, and / or epoxy flooring systems over interior concrete slabs, the Owner's Special Inspector shall make known the level of water vapor transmission in the slab in accordance to ASTM F 1869-98 to all parties involved. The Owner's Special Inspector will document the test results and provide recommendations on the type of moisture vapor reduction system to be utilized.

2. Surfaces to receive water vapor reduction system should be tested by an experienced firm to determine its suitability to receive a water vapor reduction system like Koester VAP I 2000.

3. Testing for concrete deficiencies and contaminates like un-reacted silicates, chlorides, A.S.R. (alkali-silica reaction), etc. is strongly recommended by Koester to avoid project failures.

3.3 APPLICATION

A. VAP I 2000 System Application:

1. The coverage rates for this Single Coat system depend on the surface texture and porosity of the substrate as well as the measured level of moisture, from Section 3.1 Examination. On average, coverage of 90-140 sq.ft./gal. can be expected.

2. Approximate Coverage Relative to Existing Levels of Moisture Vapor

Up to 10 lbs/1000 sq.ft/24hr.	140 sq.ft./gallon
Up to 15 lbs/1000 sq.ft.24hr.	100 sq.ft./gallon
Up to 25 lbs/1000 sq.ft/24 hr.	70 sq.ft./gallon

B. VAP I 2000 System Application:

1. Apply one coat of VAP I 2000 at an average coverage rate of 70-140 sq. ft. /gallon using a squeegee and or 3/8 inch nap roller leaving NO areas untreated. Allow to cure a minimum of 12 hours before installing flooring system. (See additional application instructions in Koester technical data sheets.)

C. Cementitious underlayment system Level-Pro with an epoxy primer Level-Pro Primer E or approved equal if required by the Owner, Floor Covering Installer, or the Floor Covering Manufacturer may be used to level any smooth surfaces after Shotblasting the floor on top of the water reduction system. The underlayment system utilized must be tested and approved by (no exceptions) by the manufacturer of the water vapor reduction system prior to installation. No underlayment system containing gypsum will be allowed. When water based adhesives are utilized in the floor covering installation, use an approved underlayment system with primer prior to the installation of the flooring system. Please consult the adhesive manufacturer for their minimum recommended thickness of cementitious underlayment to absorb excess moisture in the adhesive. Leveling of the substrate shall not be considered part of the water vapor reduction system. **No exceptions.**

D. For installation of resilient flooring directly over the water vapor reduction system, the contractor responsible for installing the floor covering system shall use Koester VAS Adhesives or approved equal. Use 100% solids adhesives or contact type adhesives with long working times that can be applied to substrates with a pH up to 10. The method of use is to apply the contact type adhesives to the substrate and allow the materials water to flash off prior to the flooring installation. Always test proper adhesion of adhesives to water vapor reduction system prior to installation of entire flooring system. **No exceptions.**

3.4 CLEANING

A. Clean all tools and equipment with xylene immediately after use when using the VAP I 2000 System.

B Remove all debris resulting from water vapor reduction system installation from project site.

3.5 PROTECTION

A. Protect each coat during specified cure period from any kind of traffic, topical water and contaminants.

END SECTION 09699

C. Floor treatment calcium chloride tests:

1. After proper cure of the final coat of the water vapor reduction system the Owner's Special Inspector shall provide calcium chloride tests to determine if the level of water vapor transmission and alkalinity are reduced to the Owner's specified levels in conjunction with the flooring manufacturer's installation requirements. Contact Owner and water vapor reduction system Manufacturer's Representative concerning areas with a water vapor transmission level greater than the Owner's specified levels.

D. Adhesion tests:

1. The Owner's Special Inspector shall verify proper adhesion of flooring adhesives, coatings, and leveling compounds to the final vapor reduction coating system for acceptability. Contact Manufacturer's Representatives for recommendations.

3.2 PREPARATION

A. Inspect all surfaces with regard to their suitability to receive moisture vapor reduction system with manufacturer's representative.

B. Clean all surfaces to receive moisture vapor reduction system. Shot blast all floors and clean surfaces with Shop Vac to remove all residue off the substrate. Remove ALL defective materials, and foreign matter such as dust, adhesives, leveling compounds, paint, dirt, floor hardeners, bond breakers, oil, grease, curing agents, form release agents, efflorescence, laitance, Shot blast bee bees, etc. Repair all cracks, expansion joint, control joints, and open surface honeycombs and fill in accordance with Manufacturers recommendations. Inform vapor reduction system manufacturer if concrete additives like chlorides or any other soluble compounds that can contaminate surfaces have been used in the concrete mix. Reinforcing fibers must be burned off, scraped and vacuumed, after shot blasting, leaving no fibers left on the concrete surfaces. Provide uncontaminated, sound surface. **DO NOT ACID ETCH!**

C. Repair concrete prior to moisture vapor reduction system installation by utilizing Koester SB Bonding Emulsion with approved concrete repair materials. Comply with all requirements as listed in Manufacturer's technical data information. No exceptions. Consult with vapor reduction manufacturer.

D. Make sure that surfaces to be treated with moisture vapor reduction system have NOT previously been treated with other materials like underlayments, screeds, penetrating sealants, etc. If this is the case, consult with the Manufacturers Representative prior to any application of moisture vapor reduction system.

E. Make sure that the substrate surface does not deteriorate due to the presence of sulphurous compounds or alkaline aggregate/silica reaction encountered in certain areas.

F. Any testing for concrete deficiencies / contamination like alkaline silica reaction, untreated silicates, organic residue, etc. is the responsibility of the Building owner.

G. Koester American Corp. strongly advises that surfaces to be treated with Koester material inspected and evaluated by an experienced firm prior to application of Koester Systems to determine its suitability to receive the VAP 1® System.

H. Only a surface substrate that REMAINS uncontaminated, absorptive, and sound is fit to receive a water vapor reduction system. Comply with all requirements as listed in Manufacturer's technical data information. No exceptions.

I. Proper removal of contaminants can render surfaces too tough for certain flooring systems. Therefore shot blast a small test area and verify with the flooring applicator that the surfaces are fit to receive the specified flooring system without the application of an underlayment on top of the VAP 1 2000 System.

LIMITED KOESTER VAP I® 2000 SYSTEM WARRANTY

PROJECT: _____ DATE STARTED: _____

ADDRESS: _____ DATE FINISHED: _____

_____

SIZE: SAMPLE APPLICATOR: _____

KOESTER FINAL FLOOR

SYSTEM Koester VAP I 2000 COVER SYSTEM _____

APPLIED: _____ APPLIED: _____

Koester American Corporation will warrant for a period of ten (10) years the Koester VAP I®2000 against material defects. In addition, Koester American Corporation will warrant the water vapor transmission reduction as shown in Koester American Corporation printed literature, if Koester American Corporation's suggested application instructions and any other technical information stipulated in Koester American Corporation's literature are strictly followed.

This limited warranty covers against failure due to concrete water vapor transmission as well as alkalinity up to pH 14 and includes the following:

1. Koester American Corporation approved adhesives
2. Koester American Corporation approved cementitious underlayments
3. Floor covering systems (including epoxy and polyurethane systems)
4. All labor charges involved

This limited warranty is further subject to the following conditions:

1) Koester American Corporation products must be applied as per Koester American Corporation application specifications on "structurally sound" and clean areas in which the concrete meets acceptable industry standards as defined in ACI Committee 201 Report, "Guide to Durable Concrete." If the areas to which the products are applied now or in the future fail to meet these standards, the aforementioned warranty shall be void.
2) The foregoing warranty shall be void if a cohesive substrate failure in the concrete surface occurs resulting in a delamination of the Koester VAP I Systems and/or concrete surfaces have been treated with any kind of penetrating surface sealer like silicates including alkaline silica reaction (ASR) related conditions causing Koester material to fail.
3) The aforementioned warranty shall be void if the products are applied to improper substrates in areas not properly prepared per Koester American Corporation surface preparation requirements, or bond inhibiting contaminants are present preventing proper performance/adhesion of Koester products. Cracks and joints are not covered by this warranty.
4) The foregoing warranty shall be void if Koester American Corporation's required guidelines for material coverage/surface preparation are not strictly followed (see product specifications).
5) The foregoing warranty shall be void if any cracks develop after the application of Koester American Corporation products or leakage/water vapor transmission occurs due to pin holes in the coating.
6) The foregoing warranty shall be void if the Koester American Corporation products have been applied by an applicator not approved/certified by Koester American Corporation.

Subject to the foregoing, the sole and exclusive remedy due to a breach of this warranty shall be expressly limited to the repair of defective areas due to the failure of Koester American Corporation products, and shall expressly exclude consequential damages including, but not limited to, damages to structure or to contents of structures. All accounts must be paid in full prior to any warranty being issued or enforced.

The beneficiary of the warranty must provide Koester American Corporation, 2585 Aviator Drive, Virginia Beach, Virginia 23453, a written notice within thirty (30) days of the discovery of a breach of this warranty in order to assert its right to any repairs covered by this warranty.

Charles R. King - President

VAP I 2000 Application Quick Reference Sheet & Applicator Certification Form

1. Determine vapor drive.
2. Verify if contaminants are present in concrete slab.
3. Select surface preparation standard, i.e., Csp-3 or 4.
4. Grind any areas not accessible to shot blasting.
5. Clean, vacuum deck and remove all steel shot.
6. Verify temperature and moisture parameters (50-90 F), and humidity not exceeding 80% and dew point must be 5% below humidity, steady or falling, but not rising.
7. Select spread rate for VAP I 2000 based on vapor drive. Apply using a gauge squeegee and back roll. For best results, immediately pour material on floor after mixing and spread.
8. Change roller covers after 2 hours.
9. Allow material to cure 12 hours before proceeding.

This form confirms certified applicator status to a trained flooring contractor. To maintain certification an applicator must abide by the surface preparation and application standards of the Koester VAP I 2000. Certified applicators must pay their invoices to Koester American strictly net 30 days. Failure to meet any of the listed criteria is grounds for decertification.

Contractor: _____ Date: _____

Contractor's: _____
Representative

Koester American: _____ Date: _____
Representative