

2017 FLOORING IMPROVEMENTS SM NORTHWEST/ SM SOUTH HIGH SCHOOLS

Bid No. 17-003

Bid/Construction Documents

31 January 2017

Shawnee Mission School District No. 512

7235 Antioch
Shawnee Mission, KS 66204

Shawnee Mission Northwest High School

12701 W. 67th St.
Overland Park, KS 66216

Shawnee Mission South High School

5800 West 107th St.
Overland Park, KS 66207

Kevin Cowan Architects

7840 Conser Street
Overland Park, Kansas 66204

2017 Flooring Improvements – SM Northwest/ SM South High Schools Shawnee Mission School District

BID DOCUMENTS AND TECHNICAL SPECIFICATIONS

Table of Contents
Drawing Index
Invitation to Bid
Notice of NO RESPONSE FORM
Bid Security Form
Bid Form/ Allowance
Terms and Conditions
Contractor and Vendor Code of Conduct
Accounts Payable Schedule
Propose Project Schedule
General Information
Special Terms and Conditions

DIVISION 1	GENERAL REQUIREMENTS	
01020	Contract Considerations	1-6
01200	Project Meetings	1-3
01210	Allowances	1-2
01270	Unit Prices	1-2
01300	Submittals	1-6
01700	Project Closeout	1-8
01711	Cleaning	1-2
DIVISION 2	SITE CONSTRUCTION (No Work This Section)	
DIVISION 3	CONCRETE	
03541	Hydraulic Cement Underlayment	1-4
DIVISION 4	MASONRY (No Work This Section)	
DIVISION 5	METALS (No Work This Section)	
DIVISION 6	WOOD AND PLASTIC (No Work This Section)	
DIVISION 7	THERMAL AND MOISTURE PROTECTION	
07920	Joint Sealants	1-5
DIVISION 8	DOORS AND WINDOWS (No Work This Section)	
DIVISION 9	FINISHES	
09651	Rubber Floor Tile & Base	1-6
DIVISION 10	SPECIALTIES (No Work This Section)	
DIVISION 11	EQUIPMENT (No Work This Section)	

DIVISION 12 FURNISHING
(No Work This Section)

DIVISION 13 SPECIAL CONSTRUCTION
(No Work This Section)

DIVISION 14 CONVEYING SYSTEMS
(No Work This Section)

DRAWING INDEX (17 SHEETS)

COVER SHEET – INDEX, GENERAL NOTES, LEGENDS & ABBREVIATIONS

SHAWNEE MISSION NORTHWEST HIGH DRAWINGS (11 sheets)

A - ARCHITECTURAL DRAWINGS

A001 OVERALL FIRST FLOOR PLAN
A002 OVERALL SECOND FLOOR PLAN
A003 EXISTING FLOORING IMAGE SHEET
A101 PARTIAL DEMOLITION FIRST FLOOR PLAN
A102 PARTIAL DEMOLITION FIRST FLOOR PLAN
A103 PARTIAL DEMOLITION SECOND FLOOR PLAN
A104 PARTIAL DEMOLITION SECOND FLOOR PLAN
A201 PARTIAL IMPROVEMENT FIRST FLOOR PLAN
A202 PARTIAL IMPROVEMENT FIRST FLOOR PLAN
A203 PARTIAL IMPROVEMENT SECOND FLOOR PLAN
A204 PARTIAL IMPROVEMENT SECOND FLOOR PLAN

SHAWNEE MISSION SOUTH HIGH DRAWINGS (5 sheets)

A - ARCHITECTURAL DRAWINGS

A001 OVERALL FIRST FLOOR PLAN
A101 PARTIAL ENLARGED DEMOLITION FLOOR PLAN
A102 PARTIAL ENLARGED DEMOLITION FLOOR PLAN
A201 PARTIAL ENLARGED IMPROVEMENT FLOOR PLAN
A202 PARTIAL ENLARGED IMPROVEMENT FLOOR PLAN

INVITATION TO BID

Project: 2017 Flooring Improvements SM Northwest High School and SM South High School, Shawnee Mission School District

Issue Date: 31 January, 2017

Architect: Kevin Cowan Architects
7840 Conser Street
Overland Park, KS 66204
Contact: Chad Luikart, 913-341-3288 ext 4

Owner: Shawnee Mission School District
7235 Antioch
Shawnee Mission, KS 66204

Pre-Bid Investigation: A Pre-Bid Investigation Option #1 will be held on Friday February 3rd, 2017 at 11:00am at SM Northwest High School

A Pre-Bid Investigation Option #2 will be held on Friday February 17th, 2017 at 11:00am at SM Northwest High School.

The Pre-Bid Investigation will allow Flooring Contractors to remove an area of tile and review the black floor leveling substrate under the existing VCT. Flooring Contractors will be required to replace VCT that they removed.

Bid Time/Date: 10:00 AM, 21 February, 2017

Submit Bids to: Shawnee Mission Public Schools
Attn: Everett Morgan
7235 Antioch
Shawnee Mission, KS 66204

Note: A bid form is invalid if it has not been received by the time, date and at the location designated for receipt as specified in this Invitation to Bid. Faxed, e-mailed or telephone bid proposals will not be accepted.

Description of the Work: The Work includes, but is not necessarily limited to the following:

Shawnee Mission Northwest High School, 12701 W. 67th St., Shawnee, KS 66216

The project consists of demolition, lawful disposal of flooring and base materials. Preparing floor for new rubber tile flooring and base and any other work described on the plans.

Shawnee Mission South High School, 5800 W. 107th St, Overland Park, KS 66207

The project consists of demolition, lawful disposal of flooring and base materials. Preparing floor for new rubber tile flooring and base and any other work described on the plans.

Time of Completion: The Work shall be completed according to the following:

Shawnee Mission Northwest High School

Start Date	29 May, 2017
Substantial Completion Date	25 July, 2017
Final Completion Date	1 August, 2017

Shawnee Mission South High School

Start Date
Substantial Completion Date
Final Completion Date

29 May, 2017
25 July, 2017
1 August, 2017

Receipt of Bids: Bid forms are to be received by the date and time at the location indicated in this Invitation to Bid. Any change in bid time or date will be by Addendum issued to bidders registered at the office of the Architect as having received full sets of bidding documents. Bid security in the amount of five percent (5%) of the Bid must accompany each Bid in accordance with the Instructions to Bidders.

Bid Opening: Bid forms will be publicly opened and tabulated in the Shawnee Mission Public Schools office at 7325 Antioch, Shawnee Mission, KS 66204 following receipt of bids at the time previously indicated. All interested parties are invited to attend. No award will be announced at that time.

Procurement of Documents: Bidders may obtain Bidding Documents by contacting:


Drexel Technologies, Inc.
10840 W. 86th Street
Lenexa, Kansas 66214-1632
Phone: 913-371-4430
Fax: 913-371-7128
www.drexeltech.com

General Contractor, Subcontractors and material suppliers may purchase plans and specs or a CD of bidding documents (plans and specifications) for a fee payable direct to Drexel Technologies, Inc. Contact Drexel Technologies for pricing.

All Contractors may purchase additional printed sets or partial sets of bidding documents for a fee made payable to Drexel Technologies, Inc.

Examination of the Documents: Bidding documents will be on file at Drexel Technologies, Inc. and may be examined, during normal business hours, or viewed on line at www.drexeltech.com, in accordance with the Instructions to Bidders.

The bidders list will be available from Drexel Technologies, Inc. ONLY

 <u>SHAWNEE MISSION UNIFIED SCHOOL</u> <u>DISTRICT NO. 512</u>	DATE: January 31, 2017 BID NO. 17-003 BID TITLE: 2017 - FLOORING IMPROVEMENTS SHAWNEE MISSION NORTHWEST/ SHAWNEE MISSION SOUTH HIGH SCHOOLS
Return sealed envelope to: Shawnee Mission Unified Schools Purchasing Department 7235 Antioch Shawnee Mission, Kansas 66204 ATTN: Everett Morgan E-MAILED OR FAXED BIDS WILL NOT BE ACCEPTED.	Bids will be accepted until and then publicly opened on: Date: February 21, 2017 Day: TUESDAY Time: 10:00 A.M. Terms, conditions and specifications under which bids are requested are included. Please review thoroughly.

You are invited to submit a sealed bid for **2017 - FLOORING IMPROVEMENTS AT SHAWNEE MISSION NORTHWEST/ SHAWNEE MISSION SOUTH HIGH SCHOOLS** for the Shawnee Mission Unified School District, Shawnee Mission, Kansas, for removal of VCT flooring and base and installation of rubber tile flooring, base and other associated work per the enclosed specifications and drawings. All items are to be provided as specified.

Bid price is to be lump sum, including all materials, equipment, labor, services and supervision for the work identified per the specifications and drawings herein. **DO NOT INCLUDE SALES TAX.**

Any questions regarding the bid documents should be directed to KEVIN COWAN ARCHITECTS, Chad Luikart, in written form only via E-Mail: cluikart@kcarch.com or FAX (913) 341-5160, no later than February 13th, 2017.

SM SCHOOL DISRICT PERSONNEL RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS.

NOTE: Bid Number and Name of Bidder must appear on the front of sealed envelope. ***Faxed bids will not be accepted.*** Bids must be received in the Purchasing Office prior to bid opening. If sending by U.S. Postal Service, please allow a minimum of 24 hours for your bid to be processed and delivered to the Purchasing Office by the Administrative Mail Center. It is the responsibility of the bidder to ensure delivery of bids to the Purchasing Department

THIS BID IS NOT TRANSFERABLE

Bid results will be posted on the smsd.org website within approximately 5 working days after the bid opening. Go to **Public Information; Purchasing/Bidding; Bids and Bid Summaries. Additionally, you may review the bid results in the Purchasing Office during the hours of 8:00 AM to 4:30 PM**

NOTICE OF “NO RESPONSE FORM”

BID NO. 17-003

**VENDORS WHO RESPOND TO THIS INVITATION
WITH A COMPLETED NOTICE OF “NO RESPONSE” FORM
SHALL REMAIN ON OUR MAILING LIST, IF REQUESTED.**

**VENDORS MAKING NO RESPONSE AT ALL
MAY BE REMOVED FROM OUR MAILING LIST.**

Dear Vendor:

Please check the appropriate box below, complete the remainder of this form and return it NO LATER THAN 24 HOURS BEFORE the scheduled Bid/Proposal/or Quote Date and Time.

Our company cannot provide the products, supplies and/or services listed in this bid, proposal or quote. Please **MOVE** our name and address to the following category(ies) so that we may bid at a later date.

We have chosen NOT to submit a response at this time, but would like to remain on your bid list for this product category. We did not submit a response because:

Reason(s): _____

Please REMOVE our name from all SMSD bid lists until further notice.

Reason(s): _____

COMPANY NAME: _____

REPRESENTATIVE (please print): _____

ADDRESS: _____ **PHONE (____):** _____

AUTHORIZED SIGNATURE: _____

TITLE: _____ **DATE:** _____

PLEASE RETURN THIS FORM ONLY TO:

**Shawnee Mission Unified School District #512
Purchasing Department
Notice of “NO RESPONSE”
7235 Antioch
Shawnee Mission, KS 66204
OR
Fax to: 913/993-6225**

BID No. 17-003

**SHAWNEE MISSION PUBLIC SCHOOLS
7235 ANTIOCH
SHAWNEE MISSION, KS 66204**

5% BID SECURITY FORM

If the bid for this project is equal to or greater than \$10,000, bid security is required.

Bid Security issued to: Shawnee Mission Public Schools, in the amount of **5%** of the total amount of your Bid shall accompany your Bid as a guarantee that, if awarded all or part of the Bid, your firm will enter into contract to complete the work per the Bid Specifications. **Cashier checks and certified checks should be made payable to Shawnee Mission USD #512.**

If the firm awarded the Bid defaults in entering into a contract for the execution of the work specified, the Bid Security will become the property of the School District. Bids not accepted within sixty (60) days after the time set for submission will have their Bid Securities returned.

PLEASE NOTE: Should you submit a cashier check or certified check instead of a bid bond; the following steps will be used by **SMSD** in the handling of that check:

- 1) **SMSD** will deposit your check into a **SMSD** bank account within 2-3 days after bid opening.
- 2) Within four (4) weeks after board approval of the bid, a district check shall be mailed to the non-successful bidder(s) to reimburse them for the exact amount of their cashier/certified check.
- 3) Within four (4) weeks after the completion of a formal written and properly signed contract, or the issuance of a **SMSD** purchase order, a district check shall be mailed to the successful bidder(s) for the exact amount of their cashier/certified check.

NOTE: **IF BID SECURITY IS NOT ENCLOSED WITH THE BID, IT WILL BE CAUSE FOR REJECTION OF THE BID.**

	\$	
Company		Amount of Total Bid

	\$	
Address		Amount of Bid Bond

_____ **Bid Security attached to this form. (Please send the two together.)**

Signature of Authorized Representative	Phone

Please Print Name	Position

BID FORM

BID No. 17-003

BID OF: _____

A CORPORATON ORGANIZED AND EXISTING UNDER THE LAWS
OF THE _____

A PARTNERSHIP CONSISTING OF _____
_____ PARTNERS:

OR: A SOLE PROPRIETOR; HERINAFTER CALLED THE BIDDER.

TO: SHAWNEE MISSION PUBLIC SCHOOLS
ATTN: MR. EVERETT MORGAN
7235 ANTIOCH
SHAWNEE MISSION KS 66204

The undersigned acknowledges that he has received and familiarized himself with the following:
Request for Bid
Shawnee Mission Public School District #512

For District accounting provide breakdown of each school below:

Bid Number 17-003 for 2017 Flooring Improvements at Shawnee Mission Northwest High School.
\$ _____

Bid Number 17-003 for 2017 Flooring Improvements at Shawnee Mission South High School.
\$ _____

- | | |
|--|-----------|
| A. ACKNOWLEDGE Base Bid Lump Sum price includes the following per Spec 03541 | Yes or No |
| 1. Cost to provide and install (800) 55lbs bags at SM Northwest | _____ |
| 2. Cost to provide and install (200) 55lbs bags at SM South | _____ |

B. ADDENDA NO(s): _____ Received

- C. ALLOWANCE: No.1 Include an allowance amount of \$ _____ in Base Bid. (Lump Sum)
 No. 2 Include an allowance amount of \$ _____ in Base Bid. (Lump Sum)

D. UNIT PRICES: Include adds and credits for the following UNIT PRICES:

Provide amounts for both blanks.

For changes in the work, state the unit prices to Add or Deduct from the contract price as follows. (The Add unit price shall not exceed the Deduct Unit price by more than 25%)

Unit Price No. 1: Self Leveling Compound: Provide a unit price per 55lb bag to furnish and install Schonox ZM self-leveling compound.
Add \$_____ / Credit \$_____

Unit Price No. 2: Rubber Floor Tile: Provide a unit price per square foot (SF) to furnish and install new rubber tile, compliant with Specifications.
Add \$_____ / Credit \$_____.

Unit Price No. 3: Resilient Wall Base: Provide a unit price per lineal foot (LF) to furnish and install new resilient wall base, compliant with Specifications.
Add \$_____ / Credit \$_____.

Unit Price No. 4: Floor Crack Repair: Provide a unit price per lineal foot (LF) to furnish and install Schonox PGH crack repair, compliant with Specifications.
Add \$_____ / Credit \$_____.

The undersigned further acknowledges that he has familiarized himself with local conditions affecting the cost of the work at each place where the work is to be done.

In submitting this bid, the undersigned agrees:

1. To furnish all material, labor, tools, expendable equipment, supervision and all utility and transportation services necessary to perform and complete, in a workmanlike manner, all of the work required in accord with the bid documents for the consideration hereinafter set forth.
2. To hold his bid open for sixty (60) days after receipt of bids and to accept the provisions of the instructions to bidders regarding disposition of bid security.
3. **Contactoer shall include in their bid proposal an Allowance No. 1 of \$20,000 for SM Northwest High School and Allowance No. 2 of \$20,000 for SM South High School, for unforeseen conditions. It is understood that if such allowance is not utilized by this contract a subsequent deductive change order shall be executed to return any unused allowance funds to the school district.**
4. To commence the work upon receipt of written Notice to Proceed, projected to be issued on or about February 28th, 2017, after approval of the bids by the Board of Education at its regularly scheduled meeting on February 27th, 2017, and upon receipt of the District issued Purchase Order, to deliver the support systems for the project as required and to complete all work not later than dates identified per the schedule included in these bidding documents.
5. To accept the assessment of liquidated damages of \$250 for each calendar day for each school which the work is not complete, beginning with the first calendar day after the indicated Substantial Completion Date identified per the schedule included in these bidding documents.
6. All materials to be non-proprietary, as specified, or approval equal prior to bid.

Lump Sum Base Bid: _____ **Dollars**
(both schools)

(\$ _____).

(Indicate bid in both numbers and words. In the case of a discrepancy between the two, the amount shown in words shall govern.)

In submitting this bid, it is understood that the right to reject any and all bids and to waive irregularities in the bidding has been reserved by the owner.

Date this _____ day of _____, 2017.

Name of Bidder

Address of Bidder

Authorize Officer

Area Code/Telephone Number

Terms and Conditions

A. Bid Requirements and Considerations:

1. The Board of Education reserves the right to reject any or all bids, to accept any item or items in the bid, and to waive any informality in bids.
2. Each bid must be completed on SMSD bid forms.
3. Alternate bids will be considered only if PRE-APPROVED AND PRIOR TO BID and if the alternate properly meets specifications outlined in the bid.
4. Each bid (if exceeding \$10,000) shall be accompanied by bid security in the amount of five percent (5%) of the base bid, made payable unconditionally to the school district. This security will be submitted as evidence of good faith as a guarantee that, if awarded the contract, the bidder will execute required bonds and insurance within ten (10) days after receipt of Notice to Proceed.
5. Each bidder shall carefully examine the bidding documents and thoroughly inform himself with all requirements prior to submitting a bid. Should a bidder find discrepancies or ambiguities in, or omission from bidding documents, or should he be in doubt as to their meaning, he will at once and at least three days prior to bid date, notify the school district. Any subsequent addenda sent to bidders will become part of the contract documents.
6. Prior to submitting a bid, each bidder shall examine and thoroughly familiarize himself with all existing conditions; including applicable laws, codes, ordinances, rules, and regulations that will affect his work. Bidders shall visit the site, examine the existing conditions, and shall ascertain by reasonable means, all conditions that will in any manner affect the work. Contractors and/or bidders are required to check in with building authorities at the school immediately upon entering the school premises.
7. Prices quoted are to be free of all Federal, state, and local taxes, unless otherwise imposed by a governmental body and applicable to the work or material. The school district will obtain from the State of Kansas a sales tax exemption certificate number. The sales tax exemption certificate will permit the contractor to purchase materials for incorporation into this project without paying sales tax, provided that the contractor furnishes the certificate number to the supplier.
8. When submitting a substitute article as equal, the full name and illustrated description must be given. The Board of Education reserves the right, however, to decide upon its suitability for the intended use. Upon request, samples of substitute articles must be submitted.
9. Envelopes containing bids must be sealed and marked on the lower-left hand corner with the firm name and address of the bidder, bid number, bid opening date, and bid opening time.
 - a. No special effort shall be made to sort incoming mail for potential bids.
 - b. Bids not at the appointed place at time of bid opening will be rejected.
 - c. Faxed Bid/Proposals will not be accepted as sealed bids.

10. If bid is accepted, USD #512 must be supplied with seller's employer identification number or social security number, per IRS regulations.
 11. Each contractor is responsible for his/her own worker's compensation and liability insurance coverage. Shawnee Mission Unified School District #512 assumes this COVERAGE IS INCLUDED IN THE PRICE OF EACH BID TOTAL.
 12. Any catalog, brand name or manufacturer's reference used herein is intended to be descriptive and not restrictive. Offers on any reputable manufacturers regularly produced product which is similar and substantially equivalent will be considered. SMSD reserves the right to make final decisions as to the acceptability of comparable items.
 13. Vendors who do not bid, but wish to remain on our bid list, should notify the Shawnee Mission USD #512 Purchasing Department in writing using the enclosed "Notice of No Response" form. Failure to do so may result in removal from this list.
 14. If required by the bid form, the contractor shall submit with his bid a list of subcontractors and other persons or organizations that will perform work on this project.
- B. Form and Requirements of the Contract:
1. The form of contract will be a Purchase Order issued by Shawnee Mission School District. In submitting his bid for consideration, each bidder agrees to commence work as soon as practical upon receipt of the school district purchase order and subsequent execution of applicable bonds and certificates of insurance.
 2. The district shall not be responsible for any goods delivered or services performed without its purchase order signed by an authorized representative of the Purchasing Department.
 3. The contractor shall not commence work under this contract until he has obtained the owner's approval of a certificate of insurance providing evidence that he has obtained all the insurance required under this section, at least equal to the limits set forth hereinafter, with an insurance company acceptable to the owner.

All policies shall provide for ten (10) days written notice to the owner prior to effective date of any changes affecting the policy. Two copies of the certificate of insurance in a form acceptable to the owner shall be delivered to the owner. The contractor shall not allow any subcontractor to commence work until the subcontractor has obtained insurance coverage similar to that required of the contractor.
 4. For projects with a value of \$20,000 or more; subsequent to award, the contractor shall furnish Performance Bond, Labor and Materials Payment Bond, and Kansas Statutory Bond covering the faithful performance of the contract and the payment of all obligations arising thereunder. All such bonds shall be submitted to the school district prior to the commencement of any contract work.
 5. Contracts entered into on the basis of submitted bids are revocable if contrary to law.
 6. The laws of the State of Kansas shall govern any contracts resulting from this bid. Actions

must be filed in the Johnson County Courthouse in Johnson County, Kansas.

7. The seller shall provide the standard patent infringement indemnity clause which shall hold and save the Board of Education and its officers, agents, servants, and employees, harmless from liability of any patented or unpatented invention, process, article, or appliance manufactured, or used, in the performance of the contract, including its use by the Board of Education.

C. General Work Requirements.

1. The contractor will be required to start the work per the schedule included herein. Liquidated damages as stated on the bid form will be assessed for each consecutive calendar day which the work is not substantially complete, beginning with the first day beyond the substantial completion time stated. Substantial completion is the owner's ability to utilize the facility for its intended purpose. Shawnee Mission Public Schools will be the sole judge of substantial completion.
2. The owner reserves the right and may delay work if scheduling between school administration and contractor cannot be resolved.
3. It will be the contractor's responsibility to have the approaching licenses and permits required by the state and/or municipality in which the work will be performed. It is also the contractor's responsibility to make certain all work and material meets local and state codes. Bidders shall include permit fees in their bid.
4. The contractor shall observe and comply with all ordinances, laws, and regulations, and shall protect and indemnify the owner against any claim or liability arising from or based on any violation of the same. The contractor shall comply with all regulations of agencies having jurisdiction with respect to sanitation and safety during construction.
5. All items shall be new and unused, unless otherwise specified by the district, and in first class condition.
6. Contractor shall be responsible for protection of the adjacent spaces during all phases of the project, demolition material storage and new construction.
7. All items furnished must be of their respective kinds, and will be free from defects in material and workmanship. Items will be subject to our inspection and approval at any time. Items furnished must be manufactured in compliance with all existing legal or governmental directives.
8. All work shall be of the highest quality. The contractor and subcontractor shall check their work regularly for quality and conformance as the work is in progress. Unsatisfactory work shall be corrected immediately.
9. The contractor shall promptly correct work rejected by the owner or failing to conform to the requirements of the contract documents, whether observed before or after substantial completion and whether or not fabricated, installed or completed. The contractor shall bear all costs of correcting such rejected work, including additional testing and inspections and compensation for owner services and expenses made necessary thereby.

10. As work is completed by the contractor/subcontractor, it shall be his responsibility to remove all excess material, equipment and debris from the premises.
11. Upon substantial completion, a scheduled punchlist inspection shall be conducted by the school district and Architect to identify any item(s) requiring additional work. All items noted on the punchlist shall be accomplished by the contractor prior to Final Completion and final payment.

D. Miscellaneous Requirements

The law requires that Section 1 through 5 of KSA 44-1030 (as follows) are to be included in all contracts to which our agency is a party: Except those with contractors, vendors or suppliers whose cumulative dollar total in any fiscal year is \$5,000.00 or less, or who have fewer than four (4) employees:

1. The contractor shall observe the provisions of the Kansas act against discrimination and shall not discriminate against any person in the performance of work under the present contract because of race, religion, color, sex, physical handicap unrelated to such person's ability to engage in the particular work, national origin or ancestry;
2. In all solicitations or advertisements for employees, the contractor shall include the phrase, "equal opportunity employer" or similar phrase to be approved by the commission;
3. If the contractor fails to comply with the manner in which the contractor reports to the commission in accordance with the provisions of KSA 1976 Supp .44-1030, as amended, the contractor shall be deemed to have breached the present contract and it may be canceled, terminated or suspended, in whole or in part, by the contracting agency;
4. If the contractor is found guilty of violation of the Kansas act against discrimination under a decision or order of the commission which has become final, the contractor shall be deemed to have breached the present contract and it may be canceled, terminated or suspended, in whole or in part, by the contract and it may be canceled, terminated or suspended, in whole or in part, by the contracting agency; and
5. The contractor shall include the provisions or paragraphs one (1) through (4) inclusively of this subsection (a) in every subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor.

E. Payments to the Contractor:

Progress payments will be allowed. In order for payment to occur on the "Payment Release Date", the vendor's INVOICE and the "BLUE" receiving copy of the Shawnee Mission purchase order must be received into the Business Office by the school cut-off date (preferably earlier) so that sufficient time is allowed for the payment to actually be processed through the Accounts Payable system.

INVOICES MUST BE SUBMITTED TO THE ARCHITECT FIVE DAYS PRIOR TO THE SCHOOL CUT-OFF DATE.

CONTRACTOR AND VENDOR CODE OF CONDUCT

Shawnee Mission School District requests that all contractor and vendor employees conduct themselves in an acceptable manner while performing work on school district property. The following items are prohibited on school district properties:

1. Physical or verbal contact with students or non-designated staff.
2. All school district properties are tobacco free. All tobacco, including smokeless tobacco, is prohibited. There are no designated areas for tobacco use. Contractors are required to post no tobacco signs. Smoking will not be permitted inside private vehicles which are on school district property. Workers may be required to sign a consent form acknowledging no tobacco use on the property. Violators may be required to leave the work site.
3. Drugs and/or alcohol consumed or present on district properties.
4. Firearms and hunting items.
5. Foul or abrasive language.

Additionally, all workers shall wear appropriate clothing on all parts of the body. All workers shall utilize areas for vehicle access and parking, material storage, etc. All workers shall wear nametags identifying their name and the name of the company they are representing.

INSURANCE REQUIREMENTS

- A. Worker's Compensation Insurance: Worker's Compensation and Employer's Liability Insurance as required by law to cover fully all employees.
- B. Bodily Injury and Property Damage Insurance: A comprehensive general bodily injury and property damage policy, including automobiles, covering the work to be performed. The policy shall be written to provide damage arising from one accident, with not less than \$1,000,000 aggregate damages to, or destruction of property during the policy period; except, in case of automobile damage coverage, the minimum provided shall be not less than \$1,000,000 bodily injury and \$1,000,000 property damage per accident for any vehicle used on the project, whether owned, hired or nonowned.
- C. Special Insurance: Contractor for General Construction work shall take out and maintain insurance providing a minimum coverage of \$1,000,000 for the following hazards:

Where the work to be performed involves excavation or other underground work or construction, the property damage insurance provided shall cover all injury to or destruction of property below the surface of the ground, such as wires, conduits, pipes, mains, sewers, etc., caused by the contractor's operations, or injury to or destruction of property above or below ground resulting therefrom.

Property damage insurance shall also cover the collapse of, or structural injury to, any building or structures on or adjacent to the owner's premises, or the injury to or destruction of equipment and/or property resulting therefrom, caused by the removal of other buildings, structures, or supports, or by excavation below the ground, where the construction of a new structure or the demolition of any existing structure involves any of the foregoing designated hazards and in all cases where the contract provides for alterations in, additions to, or the underpinning of, and existing structure or structures.

- D. Subcontractor's Insurance: If a part of this contract is sublet, the contractor shall either cover any or all subcontractors in his insurance policies; **or** require each subcontractor to secure insurance which will protect him against all applicable hazards not covered by the contractor's insurance.

**INVOICES MUST BE SUBMITTED TO SHAWNEE MISSION SCHOOL
DISTRICT AT LEAST FIVE DAYS PRIOR TO THE
SCHOOL CUT-OFF DATE
(preferably earlier)**

**SHAWNEE MISSION PUBLIC SCHOOLS
ACCOUNTS PAYABLE SCHEDULE**

School Cut Off	Payments Released
7/14/2016	7/26/2016
8/5/2016	8/16/2016
9/16/2016	9/27/2016
10/14/2016	10/25/2016
11/18/2016	11/29/2016
12/9/2016	12/20/2016
1/13/2017	1/24/2017
2/17/2017	2/28/2017
3/10/2017	3/28/2017
4/14/2017	4/25/2017
5/12/2017	5/23/2017
6/16/2017	6/27/2017

Note: Additional dates beyond June 2017 will be added as they become available pending Board of Education schedule establishment for the 2017-2018 School Year.

PROPOSED PROJECT SCHEDULE

Flooring Improvements at Shawnee Mission Northwest/ Shawnee Mission South High Schools
Bid Number 17-003

<u>DATE</u>	<u>ACTIVITY</u>
1/31/17-2/21/17	Bid Period
2/3/17	Prebid Site Investigation Opportunity #1
2/17/17	Prebid Site Investigation Opportunity #2
2/21/17	Bid Opening
2/27/17	Bid Approval by Board of Education
2/28/17	Notice to Proceed
2/28/17-5/29/17	Submittal Review Review materials and material procurement.
5/29/17-7/25/17	Installation period
7/25/17	Substantial Completion, Identification of Punchlist list
7/25/17-8/1/17	Correction of Punch list items
8/1/17	Final Completion

Note: The Flooring Contractor shall include in base bid all evening hours and weekend hours required to meet Substantial Completion and Final Completion dates. Coordinate available times with SMSD.

PROJECT BUILDING LOCATIONS

Shawnee Mission Northwest High School	12701 West 67 th St. Shawnee, Kansas 66216
Shawnee Mission South High School	5800 West 107 th St. Overland Park, KS 66207

GENERAL INFORMATION

1. TERMINOLOGY

The term contractor, manufacturer and supplier may be used interchangeably. Purchaser or Owner shall refer to Unified School District #512 of Johnson County, Kansas (Shawnee Mission Public Schools).

2. TEMPORARY UTILITIES

Temporary power required for installation shall be from the building services. All required cords or other connections shall be the contractor's responsibility.

3. PERMITS AND FEES

All necessary permits and fees for surveys, licenses, site preparation, utility connections to comply with applicable state and local codes or statutes and other similar charges, except those required for transportation of the structure, will be the responsibility of the contractor unless the Contract specifically states otherwise.

4. CRITERIA FOR AWARD OF CONTRACT

In addition to the dollar sum bid, the Owner will review the following in formulating the decision to award a Contract. These additional criteria are:

- A. The successful Bidder preferably to be a manufacturer or authorized contractor.
- B. The length of construction time in accordance with specified delivery time period.
- C. The probability that the Bidder can perform in accordance with the Bidding Document.
- D. The likelihood that the Contractor will perform without delay or interference.
- E. The responsibility and reputation of the Bidder.

5. PAYMENT SCHEDULE

The contractor may draw progress payments as the work progresses. Each progress payment will have ten percent (10%) retainage withheld until the project is complete. The balance (ten percent) shall be paid within thirty days of the completion of the punch list, final acceptance, and consent of surety to release of lien.

6. REQUIRED BONDS

Bid Security - A bid security in the form of a Bid Bond in 5% of the greatest amount bid must be included with the bid at time of bid opening. A cashier's check may be utilized for this requirement if prior notice of such intent is given the Owner.

Performance and Payment Bond -The successful Bidder, upon notice of award of contract will, within fifteen working days, and prior to commencement of work, provide the owner performance and payment bonds for 100% of the total sum bid.

Statutory Bond -The successful Bidder, upon notice of award of contract will, within fifteen working days, and prior to commencement of work, provide Kansas Statutory Bond covering the faithful performance of the contract for 100% of the total sum bid. The Statutory Bond must be filed with and recorded by the Johnson County District Clerk.

General -All bonds submitted must be issued by an entity authorized to do business in Kansas for the specific purpose of issuing bonds. If issued by an agent, the bond must carry a Power of Attorney and all required seals. Photo copies of bonds will not suffice for this requirement.

7. INSURANCE

Insurance per the Terms and Conditions.

8. LIQUIDATED DAMAGES

All materials must be delivered to the site as required by the Bidder to allow the work to progress as needed to achieve the Substantial Completion date. Upon arrival on site, the contractor/supplier is to finish all work necessary to complete the installation in its entirety. Contractor/Supplier shall finish said functions by the Substantial Completion Date as determined by the schedule indicated in these bidding documents. Failure to meet this requirement will result in a forfeiture of \$250.00 for each consecutive calendar day for each school which the work is not complete, beginning with the first day beyond the substantial completion time stated, NO EXCEPTIONS.

9. MATERIAL SUBSTITUTION – PRE-APPROVED PRIOR TO BID ONLY

In some instances, circumstances may dictate substitutions. Any changes and/or substitutions of materials, products, equipment, etc., as specified herein may be made by the Contractor, provided that such change and/or substitution are of like grade and equal or better quality than the originally specified items and that any substitutions shall be approved by the Owner and Architect prior to bid.

10. CLEAN-UP

The Contractor shall clean-up on a daily basis and insure that upon completion, the site is cleaned, left free of excess materials, and all debris properly disposed of in waste containers.

11. SHOP DRAWINGS / MATERIAL SUBMITTALS

A complete set of shop drawings and/or material submittals shall be submitted to the Architect for review. The drawings will be to scale, complete with notes, and reflect all elements of the installation.

12. PRODUCT SELECTION

The manufacturer warrants that no materials, glues, paints, insulation, nor other products used in the construction of these buildings contains asbestos, lead paint, or volatile organic compounds.

13. DESCRIPTION OF THE WORK

Shawnee Mission Public Schools is soliciting bids for the **2017 Flooring Improvements at Shawnee Mission Northwest/ Shawnee Mission South**, which shall include removal of the existing vct flooring and wall base and installation of new rubber tile flooring and wall base as described in the plans and specifications. This bid is to include all labor, materials, equipment, supervision; and all installation work as needed. **All bidders are encouraged to visit the sites to see the conditions prior to submitting a bid. All visitors to the sites must check in at the Main Office upon arrival.** Refer Invitation to Bid for special Pre-bid options to meet and tour sites.

14. SPECIFICATIONS

Specifications are detailed in the attached specifications and information.

15. SPECIAL TERMS & CONDITIONS

The terms and conditions are set forth on pages enclosed. **Refer to the Bid Form for allowances that apply to this project to be included in the bid.**

SPECIAL TERMS AND CONDITIONS

1. After a "Notice to Proceed Letter" is issued to the successful Bidder, the Bidder shall prepare a **Project Schedule of the Work** identifying all phases/buildings of the project and the time frame for each phase/buildings. This schedule shall include the time necessary for field verification, preparation of submittals, materials procurement, the removal of existing flooring and installation of new flooring, testing, inspection and any other phases that the Bidder indicates as part of the complete Project. This schedule shall include the Substantial Completion date, time frame for punch list and end with Final Completion.
2. The **Project Schedule of the Work** shall be submitted to the Owner and Architect within 5 days for coordination with the School Calendars and for approval.
3. The **Proposed Project Schedule** indicated on prior pages of these Bidding Documents is geared toward the Contractor being allowed to start work immediately after SMSD Board Approval and receipt of insurance and bonds. Evening hours shall be considered to be 3:30 PM to 11:00 PM from Monday through Friday. Evening hour work will not be allowed on evenings when a regularly scheduled night function is schedule to be in the building. These dates will be made available to the Contractor for planning purposes.
4. The Contractor is to be responsible for all clean-up work of the construction area after each evening work sessions. The work areas will be required to be clean and ready for school function prior to leaving the site. District staff is not responsible for clean up behind the Contractor.
5. At any time that special protection should be required around a portion of the building or work area, the Contractor is completely responsible for all protective measures such as barriers, temporary railings, etc. as required to maintain the building in a safe and occupiable condition.
6. A construction staging area, dumpsters, site storage area and work area will be allowed to the Contractor on the building site. This location shall be coordinated between the Contractor and the District. The Contractor shall be responsible for all required security measures at no additional cost to the District.
7. The Contractor shall plan his schedule accordingly in order to meet the Substantial Completion Date identified on the Bid Form.
8. **In a separate set of drawing documents are floor plans of the building. If there are any questions about the floor plans, please notify the contact listed at the front of these specifications.**

SECTION 01020 - CONTRACT CONSIDERATIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Schedule of values.
- B. Bid Cost Breakdown.
- C. Application for Progress Payment.
- D. Application for Final Payment
- E. Change Orders and/or Clarifications.

1.02 SCHEDULE OF VALUES

- A. The Contractor will submit to the Architect, a Schedule of Values that includes all major categories of work and per building if applicable. The Schedule of Values will annotate a value for the construction schedules and progress meeting notes required by the contract documents. The dollar amounts are to include all labor, material, overhead and profit applicable to each item in the breakdown. As a sub-breakdown, each item is to be separated into an estimated labor and materials line item. The Contractor must submit an estimated total value for the projected cost of supplies, materials, and equipment required. Submit typed schedule on AIA Form G703 - Application and Certificate for Payment Continuation Sheet. Contractor's standard form of electronic media printout will be considered as an alternate form of submission.
- B. Submit Schedule of Values in triplicate within five (5) calendar days after contract for construction is executed along with the Construction Schedule. Schedule shall list the installed value of the component parts of the work, broken down in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. Format: At a minimum, use the Table of Contents in this Project Manual to identify each line item with number and title of the major specification section.
- D. Add to the Schedule of Values approved Change Orders, with each Application for Payment. List Change Orders in numerical sequence with each Application for Payment.
- E. Correlate line items in the Schedule of Values with other required additional schedules and forms including:
 - 1. Contractor's construction schedule
 - 2. Contract payment request form
 - 3. List of subcontractors.
 - 4. List of products.
 - 5. List of principle suppliers and fabrications.
 - 6. Schedule of submittals.
- F. Prior to making application for the first progress payment, the Contractor must submit the Schedule of Values. No progress payments will be made until the schedule of values has been received, reviewed and approved by the Architect and Shawnee Mission School District. The costs assigned to the breakdown are to total the contract sum. The approved Schedule of Values is to be used by the Contractor on their Application for Payment.

1.03 BID COST BREAKDOWN (See Bid Form for any applicable requirements)

1.04 APPLICATION FOR PROGRESS PAYMENTS

- A. At a time consistent with the requirements of this section and the Owner-Contractor Agreement, and for each calendar month during the progress of the work, submit three (3) copies of a properly notarized itemized Application for Payment prepared in a manner consistent with the Schedule of Values.
- B. The amount shown on the Application for Payment shall be established by the value of work completed through the last day of the application period based upon the Contractor's estimate of labor and materials incorporated in the work and of materials suitably stored in accordance with the contract through the last day of the previous application, less the aggregate of previous payments, and less the retainage as specified in this section.
- C. The form of application for payment shall be the May, 1992 edition of AIA Document G702. "Application and Certificate for Payment", supported by AIA Document G703. "Continuation Sheet", May, 1992 edition.
- D. Provide the following itemized data on Continuation Sheet:
 - a. Format, schedules, line items, and values shall be from the Schedule of Values accepted by Architect.
 - b. Include names, trades and amount for subcontractors.
 - 1. Application Form:
 - a. Fill in required information, including that for change orders executed prior to the date of submittal application.
 - b. Fill in summary of dollar values to agree with the respective totals indicated on the continuation sheet.
 - c. Execute certificate with the signature of a responsible officer of the contractor's firm.
 - 2. Continuation sheets:
 - a. Fill in total list of all scheduled component items of work, with each number and the scheduled dollar value of each item.
 - b. Fill in the dollar value in each column for each scheduled line item when work has been performed or products stored. Round off values to nearest dollar, or as specified in the Schedule of Values.
 - c. List each change order executed prior to the date of submission, at the end of the continuation sheets. List by change order number, description, and breakdown of costs as for an original component item of work.
- E. Substantiating Data for Progress Payments:
 - 1. Substantiating data is required to verify a payment request. Contractors are to include a cover letter identifying:
 - a. Project.
 - b. Application number and date.
 - c. Detailed list of enclosures.
 - d. For stored products: Item number and identification as shown on application, and description of specific material. Include Bill of Sale, Non-Negotiable Bailment Receipt (see form at the end of this section) and applicable insurance certificate.
 - 2. Submit one copy of the data cover letter for each of the applications.
- F. Applications for Payment shall be accompanied by cost breakdowns from the contractor, subcontractors and sub-sub-contractors.
- G. The three notarized copies of the application for payment will be transferred to the architect to be certified for payment. Provide a copy (non-notarized) to the owner's representative.

1.05 APPLICATION FOR FINAL PAYMENT

- A. Submit final Application for Payment following the procedures specified above for progress payments.
- B. Before submitting final Application for Payment, forward concurrently to the Architect, the written warranties and guarantees, Record and Information Manuals and other documents required by the contract documents, and place properly in approved storage at the site the extra stock and spare parts specified. Contractor will obtain the signature of the Architect verifying receipt of the extra stock and spare parts.
- C. Properly executed "Final Lien Waiver and Release" and Contractor's "Affidavit" shall be submitted to the Architect in duplicate prior to final payment.
- D. Application for Final Payment shall be accompanied by a properly executed "Consent of Surety Company to Final Payment: AIA Document G707, April, 1970 edition.

1.06 CHANGES AND/OR CLARIFICATIONS

- A. Request for Information (**RFI**)
 - 1. If during the construction of the project, clarification of the documents is required, it shall be brought to the attention of the Architect. The Architect will either provide clarification or the Contractor will issue a Request for Information (RFI) to the Architect. Each RFI will be dated and sequentially numbered. The Architect shall provide his written response to the RFI and return to the Contractor for distribution to all effected contractors.
 - 2. Responses to RFI's are not authorization to proceed with work requiring additional compensation. If additional compensation is required, the Contractor shall immediately advise the Architect, and Owner.
- B. Proposal Request (**PR**)
 - 1. Should the owner contemplate making a change in the work, the architect will issue a Proposal Request (PR) to the Contractor. If the described change impacts cost and/or time, the Contractor will prepare a proposal for submission to the Architect. The Contractor's proposed bid shall be broken down completely giving quantity and unit costs by each trade of each item, labor cost with hourly rates, allowable overhead and profit (both adds and deducts). The Owner and Architect will review the pricing to determine if a change order will be issued. Contractors are not to proceed with additional work until written authorization has been received. No additional amount will be paid for submittal in this form or for resubmittal should the breakdown be considered inadequate by the Architect and Owner.
- C. Change Orders (**CO**)
 - 1. If the Owner determines that a Proposal Request will be accepted, the Architect will prepare a change order (CO) which will be dated and numbered sequentially. The change order will describe the change or changes, will refer to the Proposal Request and Proposal number and becomes valid when signed by the Owner, the Architect and the Contractor.
 - 2. Where unit prices are not required by the bid documents and value of changes or extra work is determined by estimate and acceptance in a lump sum, by cost and percentages, or by cost and a fixed fee, the percentages for overhead and profit, or commission to be allowed for net increases shall in no case exceed the figures identified on the bid form.
 - 3. Estimates for material shall be based on reasonable current market value at which materials are available to the Contractor and Subcontractor. Upon request, submit satisfactory evidence of such costs. Labor unit costs shall include associated insurance.

4. When authorized by the Owner, time and material accounting of a change in work may be used. The Contractor shall maintain an accurate account of labor and material involved in each change. Such time and material records are subject to verification. Notify Architect and Owner when work on each change is to start and when it has been completed. To receive full recognition, labor assigned to Contract changes must, insofar as possible, work continuously on the change, rather than interchanging between contract work and the change.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

FINAL LIEN WAIVER AND RELEASE

Reference that certain Agreement between _____, as Contractor, and _____, as Owner, dated _____, on the project known as _____ located at _____ for work to be performed by said Contractor.

Reference also that certain invoice of Contractor to said Owner in the Amount of \$ _____ for work, labor and materials installed in or furnished for said project by and through _____.

The receipt by Contractor of Owner's remittance for the amount said invoice, contingent upon the final clearance and payment of said remittance, shall constitute payment for the full contract amount, including change orders and all other claims or demands of any nature whatsoever which Contractor has or may have in connection with the Project or Contract referenced herein, of \$ _____, for which Contractor (a) agrees to and does hereby waive and release said property, project and the Owner and all bond or payment sureties and guarantors from; and (b) does hereby agree to protect, indemnify, defend and hold harmless said property, project, Owner, sureties and guarantors against;

- (1) any and all liens, statutory or otherwise, and
- (2) any or all obligations under any bond or guaranty for payment furnished by or to said Owner, whether pursuant to agreement or requirement of law, and
- (3) any and all other claims whatsoever, statutory or otherwise,

for any and all work, labor and materials furnished by or through said Contractor, its subcontractors and material suppliers for the entirety of said project.

The remittance of the Owner, identified as payment of said above invoice and endorsed by Contractor and marked "paid" or otherwise canceled by the bank against which said remittance was drawn shall constitute conclusive proof that said invoice was paid and the payment thereof was received by the Contractor, and thereupon, this final lien waiver shall become effective automatically and without requirement of any further act, acknowledgment or receipt of the part of said Contractor.

Contractor does further warrant that Contractor has not and will not assign its claims for payment nor its right to perfect a lien against said property and project, and the undersigned representative of the contractor has the right to execute this waiver and release thereof.

The undersigned representative of Contractor does hereby certify under oath that he is fully authorized and empowered to execute this instrument for and in behalf of said Contractor and to bind them hereto and does in fact so execute this final lien release.

Dated this _____ day of _____, 20__.

Contractor:

 By:

 Title:

Subscribed and affirmed to before me, the undersigned Notary Public within and for the State of _____ and the County of _____, this _____ day of _____, 20__, in the City of _____.

Notary Public within and for said County and State

NON-NEGOTIABLE
BAILMENT RECEIPT

Receipt Number

BAILOR: Owner _____

BAILEE: Contractor/Supplier _____

PROJECT: _____

LOCATION OF STORAGE: _____

The goods and materials described below are held and stored pursuant to the Contract by and between Bailee, as Contractor/Supplier, and Bailor as Owner for Work to be performed at the above referenced Project location. Said goods and materials are to be transferred or delivered to the project site in conjunction with the performance of Bailee's contract referenced above or upon the direction of Bailor or the Architect and no other. The Bailee acknowledges that it has no ownership rights or title in, nor shall claim any lien or interest in or upon, said goods and materials.

QUANTITY DESCRIPTION OF ITEM

Received and Acknowledged Contractor/Supplier

DATED: _____ BY: _____ Authorized Signature

The undersigned representative of Contractor does hereby certify under oath that he is fully authorized and empowered to execute this instrument for and in behalf of said Contractor and to bind them hereto and does in face so execute this final lien release.

Dated this _____ day of _____, 20 ____.

Contractor: _____

By: _____

Title: _____

Subscribed and affirmed to before me, the undersigned Notary Public within and for the State of _____ and the County of _____, this _____ day of _____, 20 _____, in the City of _____.

Notary Public within and for said County and State

SECTION 01200 - PROJECT MEETINGS

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Related Documents
- B. Summary
- C. Pre-Construction Conference
- D. Pre-Installation Conference
- E. Progress Meetings

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions and other Division-1 specification sections, apply to this section.

1.03 SUMMARY

- A. This section specifies administrative and procedural requirements for project meetings including, but not limited to:
 - 1. Preconstruction conference.
 - 2. Preinstallation conferences.
 - 3. Progress meetings.
- B. Construction schedules are specified in another Division-1 section.

1.04 PRECONSTRUCTION CONFERENCE

- A. The Contractor shall schedule a preconstruction and organizational meeting at the project site or other convenient location at the earliest possible date after contract execution, and at least five (5) days prior to commencement of any construction activities. The Contractor shall conduct the meeting to review responsibilities and personnel assignments.
- B. Attendees: Shawnee Mission School District, the Architects/Consultants, the Contractor and its superintendent, major subcontractors, manufacturers, suppliers and other concerned parties shall each be represented at the conference by persons familiar with and authorized to conclude matters relating to the work.
- C. Agenda: Discuss items of significance that could affect progress, including such topics as:
 - 1. Tentative construction schedule.
 - 2. Critical work sequencing.
 - 3. Designation of responsible personnel.
 - 4. Procedures for processing field decisions and change orders.
 - 5. Procedures for processing applications for payment.
 - 6. Distribution of contract documents.
 - 7. Submittal of Shop Drawings, Product Data and Samples.
 - 8. Preparation of record documents.
 - 9. Use of the premises.
 - 10. Office, work and storage areas.
 - 11. Equipment deliveries and priorities.
 - 12. Safety procedures.

13. Lead safe work practices and lead hazard prevention procedures.
14. First aid.
15. Security.
16. Housekeeping.
17. Working hours.
18. Testing agencies and procedures.
19. Temporary utilities; water, electric, phone.
20. Temporary lavatory facilities.
21. Quality control.

- D. The Contractor shall record meeting minutes and distribute copies to everyone in attendance and to others affected by decisions of actions resulting from the meeting.

1.05 PREINSTALLATION CONFERENCES

- A. The General Contractor shall convene a preinstallation conference at the site before each construction activity that requires coordination with other construction and as required by the specifications. The Installer and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise the architect and owner of scheduled meeting dates. The GC shall schedule pre-installation meetings immediately following a progress meeting.
- B. Review the progress of the construction activities and preparations for the particular activity under consideration at each preinstallation conference, including requirements for:
1. Contract documents.
 2. Options.
 3. Related Change Orders.
 4. Purchases.
 5. Deliveries.
 6. Shop drawings, product data and quality control samples.
 7. Possible conflicts.
 8. Compatibility problems.
 9. Time schedules.
 10. Weather limitations.
 11. Manufacturer's recommendations.
 12. Compatibility of materials.
 13. Acceptability of substrates.
 14. Temporary facilities.
 15. Space and access limitations.
 16. Governing regulations.
 17. Safety and application of associated Lock Out/Tag Out procedures.
 18. Safety.
 19. Inspection and testing requirements.
 20. Required performance results.
 21. Recording requirements.
 22. Protection.
- C. Notify architect/owner four days in advance of meeting date when their attendance is required.
- D. The Contractor shall prepare agenda, preside at the conference and record significant discussions and agreements and disagreements of each conference, along with the approved schedule. The Contractor shall distribute the meeting record to everyone concerned.

- E. Do not proceed if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of work and reconvene the conference at the earliest feasible date.

1.06 PROGRESS MEETINGS

- A. Conduct progress meetings at the Project Site at a minimum of weekly intervals. Notify the Owner and Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request.
- B. Attendees: In addition to representatives of the Owner and Architect, each subcontractor, supplier or other entity concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meeting by persons familiar with the Project and authorized to conclude matters relating to progress.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the current status of the project.
 - 1. Contractor's Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's schedule, whether on time or ahead or behind schedule. Determine how operations behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed with the contract time.
 - 2. Review present and future needs of each entity present, including such items as:
 - a. Interface requirements.
 - b. Time.
 - c. Sequences.
 - d. Deliveries.
 - e. Off site fabrication status.
 - f. Access.
 - g. Site utilization.
 - h. Temporary facilities and services.
 - i. Hours of work.
 - j. Hazards and risks.
 - k. Housekeeping.
 - l. Quality and work standards.
 - m. Change orders.
 - n. Documentation of information for payment requests.
 - o. Outstanding items; submittals, proposal requests, RFIs.
 - p. Quality assurance.
 - q. Safety and application of necessary Lock Out/Tag Out procedures.
 - r. Performance of lead safe work practices.
- D. Reporting: No later than three days after each progress meeting date, the Contractor is to distribute copies of minutes of the meeting to each party present and to other parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and reports.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION

SECTION 01210 - CASH ALLOWANCES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes administrative and procedural requirements governing the use of cash allowances.
 - 1. A cash amount is specified in the Contract Document as a cash allowance. This allowance has been established to address additive cost changes in the Work to address undesignated conditions associated with construction. The use of the cash allowance is solely at the discretion of the Owner, and cannot be authorized by the Architect, Engineer, or other consultant.
- B. Related Sections include the following:
 - 1. Division 1 Section 01020 "Contract Considerations" for procedures for submitting and handling Change Orders.
 - 2. Division 1 Section 01270 "Unit Prices" for procedures for using unit prices.

1.03 USE OF ALLOWANCES

- A. At Architect's request, obtain cost proposals for the corrections of the noted undesignated conditions.
- B. Based on cost proposals received, the Owner will make a decision to utilize available allowance amounts to correct the applicable undesignated condition. The correction of individual undesignated conditions may be funded utilizing cash allowances or a formal change order at the Owner's discretion.

1.04 SUBMITTALS

- A. Submit proposals for additive costs for undesignated conditions in the same form specified for proposal requests.

1.05 RESPONSIBILITIES

- A. Architect Responsibilities:
 - 1. Consult with Owner in consideration and selection of additive cost items for consideration for application using cash allowances.
 - 2. Prepare Proposal Requests and assess proposals for application of cash allowances for Owner approval.
- B. Contractor Responsibilities:
 - 1. Identify conditions as they may occur and advise the Architect and Owner.
 - 2. Obtain proposals and offer recommendations.
 - 3. On notification of approval of cash allowance, execute agreement with designated supplier and/or sub-contractor as applicable.
 - 4. Arrange for and process applicable shop drawings, product data, and samples. Arrange for delivery.
 - 5. Coordinate and install Work of approved Cash Allowances.

6. The Contractor shall include in his Bid all fees for all Cash Allowances.

C. Funds will be drawn from Cash Allowances only by written authorization of the Owner.

1.06 SCHEDULE OF VALUES

A. The Contractor will submit to the Architect a Schedule of Values that includes all major categories of work, including applicable Cash Allowances.

1.07 COORDINATION

A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.08 ALLOWNACE COSTS

A. Allowance shall include cost to Contractor of products and materials, freight and delivery to Project Site, labor, and installation.

B. Contractor's costs for overhead and profit, and similar costs of Bonds and Insurance shall be included as part of the Contract Sum and not part of the allowance.

C. Any unused portion of the Allowance shall be credited to the Owner at the completion of the Work via a Deductive Change Order, along with the associated overhead and profit. Refer to Contract Documents for procedures and mark-ups for Deductive Change Orders.

PART 2 – PRODUCTS (Not Used)

PART 3 -- EXECUTION

3.01 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.02 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.03 SCHEDULE OF ALLOWANCES

A. Cash Allowance #1: Shawnee Mission Northwest High School: Provide a \$20,000.00 (Twenty thousand dollars) cash allowance for “undesigned conditions” as the Owner deems necessary.

B. Cash Allowance #2: Shawnee Mission South High School: Provide a \$20,000.00 (Twenty thousand dollars) cash allowance for “undesigned conditions” as the Owner deems necessary.

END OF SECTION 01210

SECTION 01270 - UNIT PRICES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this section.

1.02 SUMMARY

- A. This section includes administrative and procedural requirements for unit prices.
- B. Related Sections: The following sections contain requirements that relate to this section:
 - 1. Division 1 Section "Contract Considerations" for procedures for submitting and handling change orders.

1.03 DEFINITIONS

- A. Unit price is an amount proposed by bidders, stated on herein, as a price per unit of measurement for materials or services added to or deducted from the contract sum by appropriate modification, if the estimated quantities of work required by the contract documents are increased or decreased.

1.04 PROCEDURES

- A. The Owner reserves the right to accept or reject the unit cost bid by the Contractor for each scheduled unit price. Acceptance or rejection of unit prices shall be determined by the Owner prior to the execution of the contract for construction.
- B. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, profit, and applicable taxes.
- C. Measurement and Payment: Refer to individual specification sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those sections.
- D. The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this work measured, at the Owner's expense, by an independent surveyor acceptable to the Owner.
- E. Schedule: A "Unit Price Schedule" is included in this section. Requirements for the removal, furnishing, and installation of materials shall comply with Specifications.
- F. There shall be no more than 15% difference between the extra and the credit amounts.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 UNIT PRICE SCHEDULE: **Provide amounts for both blanks.**

For changes in the work, state the unit prices to Add or Deduct from the contract price as follows. (The Add unit price shall not exceed the Deduct Unit price by more than 25%)

Unit Price No. 1: Self Leveling Compound: Provide a unit price per 55lb bag to furnish and install Schonox ZM self-leveling compound.
Add \$_____ / Credit \$_____

Unit Price No. 2: Rubber Floor Tile: Provide a unit price per square foot (SF) to furnish and install new rubber tile, compliant with Specifications.
Add \$_____ / Credit \$_____.

Unit Price No. 3: Resilient Wall Base: Provide a unit price per lineal foot (LF) to furnish and install new resilient wall base, compliant with Specifications.
Add \$_____ / Credit \$_____.

Unit Price No. 4: Floor Crack Repair: Provide a unit price per lineal foot (LF) to furnish and install Schonox PGH crack repair, compliant with Specifications.
Add \$_____ / Credit \$_____.

END OF SECTION 01270

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Related Documents.
- B. Summary.
- C. Submittal Procedures.
- D. Contractor's Construction Schedules.
- E. Pre-existing Conditions Video Survey.
- F. Shop Drawings.
- G. Product Data.
- H. Samples.
- I. Communications Facilitating Contract Administration.
- J. Architect's Action.
- K. Contractor's Action on Returned Submittals.

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this section.

1.03 SUMMARY

- A. This section specifies administrative and procedural requirements for submittals required for performance of the work, including:
 - 1. Submittal procedures.
 - 2. Contractor's construction schedule.
 - 3. Construction photographs.
 - 4. Shop drawings.
 - 5. Product data.
 - 6. Samples.
 - 7. Informational submittals.
 - 8. Communications.
- B. Administrative Submittals: Refer to other Division-1 sections and other contract documents for requirements for administrative submittals. Such submittals include, but are not limited to:
 - 1. Permits.
 - 2. Applications for payment.
 - 3. Performance, payment bonds, and statutory bond.
 - 4. Insurance certificates.
 - 5. List of subcontractors.

- C. The "Schedule of Values" submittal is included in Division-1 Section "Applications for Payment."

1.04 SUBMITTAL PROCEDURES

- A. General: All documents transmitted for purposes of administration of the contract are to be in electronic (PDF) format and transmitted via an email address to the Architect and Owner.
- B. Shop drawing/ submittal data:
 - 1. This is to review all product data, colors, accessories required by specs and approve material procurement process. All quantities and extra attic stock is the responsibility of the Contractor.
 - 2. The Contractor shall bring all shops and product data to the meeting for review and approval and to expedite the procurement process.
 - 3. No extension of the Contract Time will be authorized because of failure to procure materials enough to start and complete all of the Work.

1.05 CONTRACTOR'S BAR CHART CONSTRUCTION SCHEDULES

- A. The Contractor shall provide Bar Chart Method. Bar Chart is required for adequate planning, evaluating and execution of the Work by all Contractors and subcontractors to evaluate the progress of the Work.
- B. Construction Schedules: The Contractor, within five (5) calendar days after execution of the contract, shall submit a construction schedule to the Owner's representative and Architect. The schedule shall be in the form of a bar chart along with the Schedule of Values.
- C. Developing the Schedule: The Contractor shall meet jointly with the subcontractors and suppliers when developing the schedule.
- D. Review: Within five (5) working days after receipt of the Contractor's schedule, the Owner and Architect shall meet with the Contractor for the final review of the schedule. Review of the schedule by the Owner and Architect does not relieve the Contractor's responsibility for the schedule's accuracy or the ability of the Contractor to meet the dates set forth therein, nor does such review constitute an acknowledgement or admission by the Owner of the reasonableness of durations or logic of the schedule.
- E. Any adjustments in Contract Time executed by Change Order shall be included in the update submittals of the project schedule.
- F. Updated Schedule Submittals: An updated schedule submittal, including a written schedule recovery statement if required, shall accompany the Contractor's Application for Payment. The Contractor's Application for Payment will not be processed until the update schedule has been received by the Owner.
 - 1. Schedule Slippage: Whenever the current schedule update reflects that the project is five (5) or more working days behind schedule, the Contractor shall submit a written statement to the Architect describing the cause of the slippage and the actions being considered by the Contractor to recover the time slot. The written schedule recovery statement shall be submitted with the monthly schedule update.
 - 2. The progress schedule shall indicate the monthly anticipated adverse weather days, if any, pursuant to the Supplemental and General Conditions and indicate the constraints of anticipated adverse weather on planned activities. Update

submittals of the progress schedule shall indicate actual adverse weather days and their impact on planned activities.

3. Any adjustments in Contract Time executed by Change Order shall be included in the update submittals of the project schedule.

1.06 PRE-EXISTING CONDITIONS VIDEO SURVEY

- A. Submit a pre-existing condition list and video prior to commencing Work. Specifically note pre-existing conditions, particularly of all interior areas which may be damaged during the work and be required to be restored to original pre-construction conditions and could result in a potential dispute with the Owner.

1.07 SHOP DRAWINGS

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the contract documents. Do not reproduce contract documents or copy standard information as the basis of shop drawings. Standard information prepared without specific reference to the project is not considered shop drawings. Shop drawings' quality is subject to approval.
- B. Shop drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
 1. Dimensions.
 2. Relationship to building grids or coordinates.
 3. Interface with adjacent construction.
 4. Identification of products and materials included.
 5. Compliance with specified standards.
 6. Notation of dimensions established by field measurement.
- C. Sheet Size: Except for templates, patterns and similar full-size drawings, submit shop drawings on sheets 8½" x 11", 11" x 17", or 30" x 42". No other sizes will be accepted.
- D. Submittal: Submit at least two black-line prints. One of the black-line prints will be retained by the Architect. The Contractor shall be responsible for making appropriate number of copies for distribution to other affected parties.
- E. Do not use shop drawings without an appropriate final stamp indicating action taken in connection with construction.

1.08 PRODUCT DATA

- A. Collect product data into a single submittal for each specified product. Product data includes printed information such as catalog cuts, Material Safety Data Sheets (MSDS), and other performance information.
 1. Mark each copy to show applicable choices and options. Where printed product data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendation.
 - b. Compliance with recognized trade association standards.
 - c. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurement.
 - f. Notation of coordination requirements.
 - g. Any limitations on warranty or guarantee of manufacturer.

2. Do not submit product data until compliance with requirements of the contract documents has been confirmed.
- B. Submittals: Submit one (1) electronic copy. The Architect will return one copy marked with action taken and corrections or modifications required.
1. Unless noncompliance with contract documents provisions is observed, the submittal may serve as the final submittal.
- C. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal form.
1. Do not proceed with installation until a copy of the applicable product data is in the Installer's possession.
 2. Provide copies for record documents described in Section 01700 – Project Closeout.
- D. Do not permit use of unmarked copies of product data in connection with construction.

1.09 SAMPLES

- A. Submit two (2) sets -1 to the Architect and 1 for the Owner, full-size, full fabricated samples cured and finished as specified (where applicable) and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or container of materials, color range sets, and swatches showing color, texture and pattern.
1. Mount, display, or package samples in the manner specified to facilitate review of qualities indicated.
Prepare samples to match the Architect's sample. Include the following:
 - a. General description of the sample.
 - b. Sample sources
 - c. Product name or name of manufacturer.
 - d. Compliance with recognized standards.
 - e. Availability and delivery time.
 2. Submit samples for review of kind, color, pattern, and texture, for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - a. Where variation in color, pattern, texture or other characteristics are inherent in the material or product represented, submit multiple units (not less than three), that show approximate limits of the variations.
 - b. Refer to other sections for sample to be returned to the Contractor for incorporation in the work. Such samples must be undamaged at time of use. On the transmittal, indicate special requests regarding disposition of sample submittals.
- B. Maintain sets of samples, as returned, at the project site, for quality comparisons throughout the course of construction.
1. Unless non-compliance with contract documents provisions is observed, the submittal may serve as the final submittal.
 2. Sample sets may be used to obtain final acceptance of the construction associated with each set.
- C. Distribution of Samples: prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the work. Show distribution on transmittal forms.

1.10 COMMUNICATIONS FACILITATING CONTRACT ADMINISTRATION

- A. Except as otherwise provided in the contract documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate through the Architect. Communications by and with subcontractors and material suppliers shall be through the Contractor.
- B. All requests for information regarding or clarification of the plans and specifications shall be made in writing referencing the specification section and statement requiring clarification. Deliver to Architect's business address.

1.11 ARCHITECT'S ACTION

- A. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Architect will review each submittal, mark to indicate action taken, and return promptly.
 - 1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Submittal Stamp: The Architect will stamp each submittal with a uniform, self-explanatory submittal stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:
 - 1. Action A – Reviewed: Where submittals are marked "Reviewed", that part of the work covered by the submittal may proceed provided it complies with requirements of the contract documents; final acceptance will depend upon that compliance.
 - 2. Action B – Reviewed – Additional Information Required: Where submittals are marked "Reviewed – Additional Information Required", the information submitted has been reviewed and approved as noted. However, additional information as noted and/or required by contract documents need to be submitted.
 - 3. Action C – Furnish as Corrected: When submittal is marked "Furnish as Corrected", that part of the work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the contract documents; final acceptance will depend on that compliance.
 - 4. Action D – Revise and Resubmit: When submittal is marked "Revise and Resubmit", do not proceed with that part of the work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.
 - a. Do not permit submittals marked "Revise and Resubmit" to be used at the project site, or elsewhere where work is in progress.
 - 5. Action E – Rejected: When submittal is marked "Rejected", information submitted is not in compliance with contract documents. Resubmit submittal as required by contract documents.
- B. Meaning of Architect's Approval: Review is only for conformance with the design concept and for compliance with the information given in the contract documents. Approval does not authorize changes involving additional cost unless stated in separate change order or letter. Contractor is not relieved of responsibility for any deviations in submittals from requirements of the contract documents. Contractor is responsible for dimensions to be confirmed and correlated at the site; for information that pertains solely to the fabrication processes or to means, methods, techniques, sequences and procedures of construction; and for coordination of the work of all trades. Approval of a specific item does not indicate approval of an assembly of which the item is a component.

- C. The Architect is contracted with the Owner to perform one (1) initial review and one (1) re-review of the submittals. Any submittals presented by the Contractor, which are incomplete or have not been reviewed and stamped with the Contractor's approval will be rejected and will be considered as the initial submittal. All re-submittals by the Contractor, whether required to provide complete or corrected initial submittal information will be reviewed and considered as the one (1) re-review submittal.

1.12 CONTRACTOR'S ACTION ON RETURNED SUBMITTALS

- A. The Contractor shall coordinate distribution of all product data/samples for the project.
- B. The Contractor is responsible to reproduce and distribute copies of stamped returned submittals as required for use or in corrections for resubmittal.
- C. The Contractor is responsible to reproduce and distribute copies of stamped returned submittals as required for his use and subcontractor's use in preparing and submitting other submittals such as, close-out, maintenance manuals, etc., Refer to other sections of the specifications for requirements.
 - 1. The Contractor shall maintain a current set of plans and specifications which shall be available to the Architect at the job site during the work.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01700 - PROJECT CLOSEOUT

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Related documents.
- B. Summary.
- C. Completion of a building and/or phase.
- D. Final completion and final payment.
- E. Record document submittals.
- G. Operating and maintenance instructions.
- H. Warranties
- I. Final cleaning.

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to this section.
- B. Refer to Section 01020 for Final Lien Waiver.

1.03 SUMMARY

- A. This section specifies administrative and procedural requirements for project closeout, including but not limited to:
 - 1. Inspection procedures.
 - 2. Project record document submittal.
 - 3. Operating and maintenance manual submittal.
 - 4. Submittal of warranties.
 - 5. Final cleaning.
- B. Closeout requirements for specific construction activities are included in the appropriate sections.

1.04 SUBSTANTIAL COMPLETION

- A. Substantial Completion:
 - 1. The Contractor and each Subcontractor shall carefully and regularly check their work for conformance with the contract documents as the Work is being done. Unsatisfactory work shall be corrected as the Work progresses and not be permitted to remain and become a part of the punch list.
 - 2. The Contractor shall conduct a pre-punch list inspection. The written pre-punch list shall be distributed to affected subcontractors, for correction of noted items. The Contractor shall provide a copy of the pre-punch list inspection and advise the Architect of the correction of the pre-punch list. This notification shall so serve to notify the Architect that the work is ready for the Architect's punch list inspection.
 - 3. The Architect shall make arrangements for his punch list inspection at the earliest

possible date following Contractor notification of correction of the pre-punch list. Transmittal of the Punch List to the Contractor shall set the date for a re-inspection prior to issuance of a Certificate of Substantial Completion. Upon receipt of the Punch List, the Contractor shall, within seven (7) days, bring to the attention of the Architect, in writing, any questions that he or any of his subcontractors may have concerning the requirements of the Punch List.

4. When advised by the Contractor that the Punch List items have been completed, the Architect shall conduct a re-inspection with the Contractor and any needed subcontractors (and the Owner's representative where applicable) to determine whether the Certificate of Substantial Completion can be issued. A Certificate of Substantial Completion will only be issued after codes administration authorities document approval and permit occupancy of the building or phase. Also note Paragraph 12 of this section.
5. When issued, the Certificate of Substantial Completion shall name the date, triggering the beginning of the warranty period (with any items to have a later starting date specifically noted). The certificate shall also have attached to it any uncompleted Punch List items, and shall name the date for their final completion. The Certificate of Substantial Completion shall also state the responsibilities of the Owner and the Contractor for maintenance, heat, air conditioning, utilities, insurance and building security.
6. Acknowledgement of the date of substantial completion by the signature of all parties on the certificate implies possession of the premises by the Owner. The subsequent completion of incomplete punch list items by the Contractor and the subcontractors shall occur at the Owner's convenience. The Owner shall cooperate in permitting the Contractor reasonable access to the work for the completion of punch list items.
7. A Certificate of Substantial Completion for the work, or portion of work as applicable, will only be issued after the requirements for the demonstration and instruction of operation and maintenance procedures as defined elsewhere by the Contract Documents, to the Owner's personnel have been satisfied by the Contractor.
8. A list of items required for submission at Substantial Completion is listed at the end of this section. This list may include specific maintenance agreements, maintenance manuals, tools, keys, spare parts, extra stock materials, operational instruction to Owner's operating personnel, etc. Any items not here-in specifically listed as required at Substantial Completion shall be submitted at Final Completion.
9. Substantial Completion Cleaning: At Substantial Completion for each project or portion of the project, clean the entire work area to a level acceptable to the Owner, for finish cleaning by the Owner's custodial personnel. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Restore reflective surfaces to their original reflective condition. Leave concrete floors broom clean. Mop VCT or seamless floor surfaces clean. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.
10. Lead Safe Project Report: The Contractor shall furnish a single report documenting compliance with recordkeeping and reporting of requirements of 40 CFR Part 745.85 including documentation that a certified renovator was assigned to the project, that the certified renovator provided on-the-job training for workers used on the project, that the certified renovator performed or directed workers who performed all of the tasks described in Part 745.85, and that the certified renovator performed the post-renovation cleaning verification described in Part 745.85. If the renovation firm was unable to comply with all of the requirements of this rule due to an emergency as defined in Part 745.82, the Contractor shall document the nature of the emergency and the provisions of the rule that were not followed. This documentation must include a copy of the certified renovator's training certificate, and a certification by the certified renovator assigned to that

project that:

- a. Training was provided to workers (topics must be identified for each worker).
 - b. Pre-renovation education and hazard communication was performed before and updated during the project.
 - c. Warning signs were posted at the entrances to the work area.
 - d. The work area was contained by:
 - (1) Removing or covering all objects in the work area (interiors).
 - (2) Closing and covering all HVAC ducts in the work area (interiors).
 - (3) Closing all windows in the work area (interiors) or closing all windows in and within 20 feet of the work area (exteriors).
 - (4) Closing and sealing all doors in the work area (interiors) or closing and sealing all doors in and within 20 feet of the work area (exteriors).
 - (5) Covering doors in the work area that were being used to allow passage but prevent spread of dust.
 - (6) Covering the floor surface, including installed carpet, with taped-down plastic sheeting or other impermeable material in the work area 6 feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to contain the dust, whichever is greater (interiors) or covering the ground with plastic sheeting or other disposable impermeable material anchored to the building extending 10 feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to collect falling paint debris, whichever is greater, unless the property line prevents 10 feet of such ground covering, weighted down by heavy objects (exteriors).
 - (7) Installing (if necessary) vertical containment to prevent migration of dust and debris to adjacent property (exteriors).
 - e. Waste was contained on-site and while being transported off-site.
 - f. The work area was properly cleaned after the renovation by:
 - (1) Picking up all chips and debris, misting protective sheeting, folding in dirty side inward, and taping it for removal.
 - (2) Cleaning the work area surfaces and objects using a HEPA vacuum and/or wet clothes or mops (interiors).
 - g. The certified renovator performed the post-renovation cleaning verification (the results of which must be briefly described, including the number of wet and dry cloths used).
11. Substantial Completion Drain Clearing. At Substantial Completion for each project or portion of the project, perform drain clearing in each building area affected by new construction or renovation work. Clear drains of debris and/or construction materials using methods acceptable to the school district. Test all affected drains to ensure proper operation prior to turn-over to the district. As required, demonstrate proper operation.
12. The Owner has contracted with the Architect/Engineer to perform one (1) initial punch list inspection and one (1) re-inspection. If the Owner incurs additional cost from the Architect/Engineer for the performance of more than one initial punch list inspection and one re-inspection, costs for any necessary additional re-inspections will be assessed to the Contractor in the way of a deductive cost change order.

B. Final Completion:

1. Submit executed warranties, workmanship bonds, remaining maintenance agreements, inspection certificates and similar required documentation for specific units of work, enabling Owner's unrestricted occupancy and use.
2. Submit maintenance manuals, tools, keys, spare parts, extra stock materials not required at substantial completion.

3. Complete final cleaning and remove temporary facilities.
 - a. Final Cleaning: At closeout time of each building, or applicable portion, reclean the work affected by punch list corrections. Remove non-permanent protection, polish glass, clean exposed finishes, touch-up minor finish damage, remove debris and broom clean non-occupied spaces, sanitize plumbing/food service facilities, clean light fixtures, sweep and wash paved areas, police yards and grounds, and perform similar clean up operations needed to produce a "clean" condition as judged by Architect and Owner.
5. All punch list work must be completed, reviewed and accepted by the Architect.

1.05 FINAL COMPLETION AND FINAL PAYMENT

- A. Provide submittals to Architect that are required by governing or other authorities. Confirm that all submittals required by the construction documents have been transmitted.
- B. Final Completion: For the purpose of determining a date at which the project is finished, final completion may be defined to include, but is not limited to:
 1. Substantial completion.
 2. Submission and acceptance by the Architect of project record drawings.
 3. Operation and maintenance data.
 4. All applicable Owner training sessions with meeting notes distributed.
 5. Final cleaning.
 7. Warranties submitted by General Contractor and accepted by Architect.
 8. Spare parts and maintenance materials turned over to proper District personnel.
 9. All Punch List work completed, reviewed and accepted by the Architect.
 - a. All of the above items are as required by individual specification requirements as found in the contract documents. These individual requirements shall take precedence over this definition if any conflict should arise.
- C. Upon written notice by the Contractor that the reinspection punch list items are completed, the Architect shall verify this by inspection and shall issue to the Owner a final certificate of payment state that, to the best of their knowledge, information and belief, the work has been completed in accordance with the terms and conditions of the contract documents, and that the entire balance found to be due the Contractor, and noted in said final certificate of payment, is due and payable. The Owner shall endeavor to make final payment within thirty (30) days.

1.06 RECORD DOCUMENT SUBMITTAL

- A. General: Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Architect's reference during normal working hours.
- B. Record Drawings: A set of blue- or black-line drawings of the original bidding documents will be provided by the Architect to the Contractor for the following use:
 1. If the Contractor elects to vary the work from the Contract Documents, and secures prior approval from the Architect, he shall record in a neat, readable manner, all such variances on the blue- or black-line drawings furnished.
 2. For plumbing; heating; ventilating; and air conditioning; electrical and fire protection work, record document drawings shall be maintained by the Contractor as the work progresses and as follows:
 - a. All deviations from the sizes, locations, and from all other features of all installations showing the contract documents shall be recorded.

- b. In addition, it shall be possible, using these drawings, to correctly and easily locate, identify and establish sizes of piping, direction etc., as well as all other features of work that will be concealed.
 - 1. Locations of underground work shall be established by dimensions to column lines or walls, by locating all turns, etc., and by properly referenced centerline or invert elevations and rates of fall.
 - 2. For work concealed in the building, sufficient information shall be given so it can be located with reasonable accuracy and ease. In some cases this may be by dimension; in others, it may be sufficient to illustrate the work on the drawings in relation to the spaces in the building near which it was actually installed. Architect's decision in this matter shall be final.
 - 3. Blue- or black-line record drawings shall be kept up to date during the entire course of the work and shall be available upon request for examination by the Architect.
 - 4. The following requirements apply to all record document drawings:
 - a. They shall be maintained at the Contractor's expense.
 - b. All such drawings shall be done carefully and neatly by a competent draftsman and in an approved form.
 - c. Additional drawings shall be provided as necessary for clarification.
 - d. The record document drawings (both blue- and black-line) shall be returned to the Architect upon completion of the work and are subject to the approval of the Architect.
 - e. Delete Architect title block and seal from record document drawings.
- C. Record Specifications: Maintain one complete copy of the project manual, including addenda, and one copy of other written construction documents such as change orders and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and product data.
 - 1. Legibly mark and record at each product section description of actual products installed, including the following:
 - a. Manufacturer's product name and product model number.
 - b. Product substitutions or alternates utilized.
 - c. Changes made by addenda and modifications.
 - 2. Upon completion of the work, submit record specifications to the Architect for the Owner's records.
 - 3. Record project manual shall be maintained at the Contractor's expense.
 - 4. Record project manual shall be maintained in a neat, readable manner. Contract work variations shall be recorded in the correct corresponding technical section of the project manual.
 - 5. Delete Architect seal from record project manual.
 - 6. Complete final cleaning and remove temporary facilities.
- D. Record Shop Drawings: Maintain a clean, undamaged set of blue or black line white prints of shop drawings as finally approved. Mark the set to show the actual installation where the installation varies substantially from the work as originally shown. Mark drawings accurately; record a cross reference at the corresponding location on the contract drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
 - 1. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the work.
 - 2. Mark new information that is important to the Owner, but was not shown on shop drawings.

3. Note related change order numbers where applicable.
 4. Organize record shop drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.
- E. Record Product Data: Maintain one copy of each product data submittal. Mark these documents to show significant variations in actual work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instruction and recommendations. Give particular attention to concealed products and portions of the work that cannot otherwise be readily discerned later by direct observation. Note related change orders and mark up of record drawings and specifications.
1. Upon completion of mark ups, submit complete set of record product data to the Architect for the Owner's records.
- F. Record Documents and Shop Drawings: Contractor to supply one complete set of approved shop drawings. Legibly mark each item to record actual construction including:
1. Measured depths of foundations in relation to fine (main) floor datum.
 2. Measured horizontal and vertical locations of underground utilities and appurtenance, referenced to permanent surface improvements.
 3. Measured locations of internal utilities and appurtenance concealed in construction, referenced to visible and accessible features of the work.
 4. Field changes of dimension and detail.
 5. Details not on original contract drawings.
- G. Record Sample Submitted: Immediately prior to the date or dates of substantial completion, the Contractor will meet at the site with the Architect and the Owner's personnel to determine which of the submitted samples that have been maintained during progress of the work are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's sample storage area.
- H. Miscellaneous Record Submittal: Refer to other specification sections for requirements of miscellaneous recordkeeping and submittal in connection with actual performance of the work. Immediately prior to the date or dates of substantial completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Architect for the Owner's records.
- I. Maintenance Manuals: Organize operating and maintenance data into suitable sets of manageable size. Submit two sets prior to Substantial Completion or final inspection, as applicable. Bind properly indexed data in individual heavy-duty, three inch, three ring vinyl-covered binders, 8½ x 11 inch test page format, with pocket folders for folded sheet information.
1. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
 2. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
 3. Contents: Prepare a Table of Contents for each volume, with each product or system description identified.
 4. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, subcontractors, and major equipment suppliers where they can be reached for emergency service at all times, including nights, weekends, and holidays.
 5. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names,

addresses, and telephone numbers of subcontractors and suppliers. Identify the following:

- a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions
 - h. Spare parts list.
 - k. Inspection procedures.
6. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.
 - d. Photo copies of warranties and bonds.
 7. Submit one copy of completed volumes in final form fifteen (15) days prior to the applicable submission requirement. This copy will be returned after review, with Architect comments. Revise content of documents as required prior to final submittal for the applicable submission requirement.
 8. Submit final volumes revised, within the (10) days after Architect review and comment.
- J. The Owner has contracted with the Architect/Engineer to perform one (1) initial Record Document review and one (1) re-review. If the Owner incurs additional cost from the Architect/Engineer for the performance of more than one (1) initial Document Review and one (1) re-review, costs for any necessary additional reviews will be assessed to the Contractor in the way of a deductive cost change order.

1.07 WARRANTIES

- A. Refer to the general conditions of the contract for construction of terms of Contractor's warranty of workmanship and materials.
- B. Standard product warranties are reprinted written warranties published by individual manufacturers for particular product and are specifically endorsed by the manufacturer to the Owner.
- C. Submit written warranties as part of the O&M's to the Architect prior to the date certified for Substantial Completion. If the Architect's certificate of substantial completion designates a commencement date for warranties other than the date of Substantial Completion of the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.

PART 2 – PRODUCTS (Not Used)

PART 3 -- EXECUTION

3.01 OPERATING AND MAINTENANCE INSTRUCTIONS

- A. General: Arrange for each Installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance, if applicable. If Installers are not experienced in procedures, provide instruction by manufacturer's representatives. Include a detailed review of the following items:
 1. Maintenance manuals.
 2. Record documents.

3. Spare parts and materials.
4. Cleaning.
5. Warranties and bonds.

END OF SECTION

SECTION 01711 - CLEANING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Description
- B. Disposal Requirements
- C. Materials
- D. During Construction
- E. Dust Control
- F. Final Cleaning

1.02 DESCRIPTION

- A. Contractor will be responsible to execute daily cleaning, during progress of the Work and at completion of the Work, as required by General Conditions. The Contractor is to daily, broom clean debris remove all refuse, rubbish, scrap material caused by his operation. The Contractor shall remove all excess spoils.

1.03 CLEANING AND DISPOSAL REQUIREMENTS

- A. Conduct cleaning and disposal operations to comply with State of Kansas, Johnson County and all local jurisdictions codes, ordinances, regulations, and anti-pollution laws.

1.04 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by the manufacturer of the surface material to be cleaned.
- C. Use only cleaning materials on surfaces as recommended by cleaning material manufacturer.

1.05 DURING CONSTRUCTION

- A. Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations or his subcontractor's operations and ensure that building and grounds are maintained free from accumulations of waste materials and rubbish. Do not allow waste materials, rubbish and debris to accumulate and become an unsightly or hazardous condition.
- B. Transport waste materials in a controlled manner with as few handling as possible; do not drop or throw materials from heights. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on to existing or new surfaces.
- C. Burning or burying of rubbish and waste materials on the project site is not permitted. Disposal of volatile fluid wastes (such as mineral spirits, oil, or paint thinner) in storm or sanitary sewer systems is not permitted. Remove waste materials, rubbish and debris

from the site and legally dispose of at public or private dumping areas off the Owner's property.

- D. Extensions cords, lines, hoses, etc. should be coiled up when not in use and at the end of the day.
- E. School restrooms used by contractors shall be kept clean on a daily basis and at final cleaning.

1.06 DUST CONTROL

- A. Clean interior spaces prior to the start of finish painting and/or other applicable work, and continue cleaning on as as-needed basis until such work is finished.
- B. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on existing and new surfaces.
- C. Broom clean interior building areas as work progresses and/or other applicable work, and continue cleaning on as-need basis until building is ready for acceptance or occupancy.

1.07 FINAL CLEANING

- A. At completion of construction and just prior to acceptance or occupancy, the Contractor will conduct a final inspection of exposed interior and exterior surfaces. Perform final cleaning and maintain cleaning until building or portion thereof, is accepted by Owner.
- B. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from interior and exterior surfaces. Repair, patch and touch-up marred surfaces to match adjacent finishes. Broom clean paved surfaces; rake clean other surfaces of grounds.
- C. Remove all waste materials and rubbish from and about the Project as well as all tools, construction equipment, machinery and surplus materials.
- D. Use experienced workmen or professional cleaners for final cleaning.
- E. Comply with cleaning instructions contained in the Specifications. In absence of specific cleaning instructions, follow accepted cleaning practices or the recommendations of the manufacturer of the material to be cleaned.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 035416 - HYDRAULIC CEMENT UNDERLAYMENT

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: This section specifies hydraulic cement based self-leveling liquid compound for filling, patching, smoothing and leveling interior and exterior substrates.
- B. Related Requirements:
 - 1. Section 09651 - Resilient (NORA) Tile Flooring.

1.2 REFERENCES

- A. Definitions:
 - 1. Friable: Substrate material easily crumbled or pulverized.
- B. Reference Standards:
 - 1. ASTM International (ASTM).
 - a. **ASTM C109/C109M** Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2 in. or [50 mm] Cube Specimens).
 - b. **ASTM C136/C136M** Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - c. **ASTM C191** Standard Test Method for Time of Setting of Hydraulic Cement by Vicat Needle.
 - d. **ASTM C348** Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars.
 - e. **ASTM C1583/C1583M** Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method).
 - f. **ASTM D4060 Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser.**
 - g. **ASTM E84** Standard Test Method for Surface Burning Characteristics of Building Materials.

1.3 SUBMITTALS

- A. Product Data: Manufacturer's standard specifications and descriptive literature, including:
 - 1. Product characteristics.
 - 2. Performance criteria.
 - 3. Safety Data Sheets (SDS).
- B. Manufacturer's written instructions, including:
 - 1. Delivery, storage and handling recommendations.
 - 2. Preparation and application recommendations.
- C. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
- D. Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- E. Manufacturer's Field Reports: Submit manufacturer's field reports within 3 days of each manufacturer representative's site visit and inspection.
- F. Installer's Experience: Submit verification of evidence of work similar to the work of this section.
- G. Warranty: Fully executed, issued in Owner's name, and registered with manufacturer, including:
 - 1. Manufacturer's 10 year warranty, from date of substantial completion, covering defects in materials.

1.4 QUALITY ASSURANCE

- A. Installer: Experienced in performing work similar to work of this section.

1.5 DELIVERY, STORAGE & HANDLING

- A. Deliver materials in accordance with manufacturer's written instructions.
 - 1. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact and product name and manufacturer clearly visible and sized to suit project.
- B. Store materials protected from exposure to harmful environmental conditions, clean, dry, frost-free and at recommended temperature and humidity levels.
 - 1. Do not store materials at temperatures lower than 41 degrees F.

1.6 EXISTING CONDITIONS

- A. Apply self-leveling underlayment only when:
 - 1. Substrate temperature is greater than 41 degrees F.
 - 2. Grinding has been completed.
 - 3. Primer has been applied.
 - 4. Cracks have been properly treated and repaired.

1.7 WARRANTY

- A. Manufacturer's Warranty: Manufacturer's standard comprehensive project warranty document executed by authorized company official.
- B. Project Warranty: Submit, for Owner's acceptance, manufacturer's standard comprehensive warranty document executed by authorized company official.
 - 1. Project warranty is in addition to and not intended to limit other rights Owner may have under Contract Conditions.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Schönox HPS North America, Inc.; 511 Wilhite Street, Florence, AL 35630; Phone: (855) 391-2649, (256) 246-0345; Fax: (256) 246-0346; Email: info@hpsubfloors.com; Website: http://hpsubfloors.com. Or approved equal by Nora Corporation.
 - 1. Schonox ZM.
 - a. **Provide in Base Bid cost to provide and install (800) 55lbs bags at SM Northwest**
 - b. **Provide in Base Bid cost to provide and install (200) 55lbs bags at SM South**
 - 2. Schonox SL for featheredge where required.
 - 3. See accessories for additional products required.

2.2 PERFORMANCE REQUIREMENTS

- A. Compressive Strength: To ASTM C109, 5800 psi at 28 days for ZM and 3700 psi for SL.
- B. Flexural Strength: To ASTM C348, 1300 psi at 28 days for ZM and SL.
- C. Tensile Strength: To ASTM C1583, 400 psi after 3 days.:
 - 1. Initial Set: approximately 60 minutes at 70 degrees F.
 - 2. Final Set: approximately 70 minutes at 70 degrees F and 20 minutes for SL.
 - 3. Foot-traffic Ready: 2hours minimum.
- D. Covering Time: 24 to 48 hours minimum with up to ¼ to 3/8 inch layer thickness.
- E. Fire Burning Characteristics to ASTM E84:
 - 1. Flame spread: 0.
 - 2. Smoke developed: 0.
- F. VOC: 0 g/l to SCAQMD Rule 1113.

2.3 DESCRIPTION

- A. Hydraulic cement based self-leveling compound for filling smoothing and leveling substrates of interior applications

2.4 MATERIALS

- A. Underlayment system: Interior use hydraulic cement based self-leveling, low VOC, underlayment [capable of permitting feathered edges on sloped substrates].
 - 1. Coverage: 200 square feet per 10 lbs bag when applied as true featheredge 60 – 70 square feet per 55 lbs bag at 1/8 inch thickness in depth.
 - 2. Layer thickness without aggregates 1/6 to 3/8 inches.
 - 3. Layer thickness with aggregates: 1/6 to 1 inches.
 - 4. Acceptable Material: HPS North America, Inc., Schönox ZM and Schönox SL
- B. Primer: In accordance with manufacturer's written recommendations and to SCAQMD Rule 1113.

2.5 ACCESSORIES

- A. Reinforcing Mat: Multiaxial glass fiber fabric.
 - 1. Acceptable material: HPS North America, Inc., Schönox Renotex.
- B. Repair Compound: In accordance with manufacturer's written recommendations.
 - 1. Acceptable Material: HPS North America, Inc., Schönox Repair Compound.
- C. Residual Moisture Mitigation: Moisture suppressor in accordance with manufacturer's written recommendations.
 - 1. Ensure moisture suppressor meets requirements of SCAQMD Rule 1113.
- D. Sand: Fine sand aggregate to ASTM C136/C136M.
- E. Crack Repair: Schönox PGH, prep and use crack repair compound at all identified joints.

PART 3 EXECUTION

3.1 INSTALLER

- A. Use only installers who have training and experience of work similar to the work of this section.

3.2 EXAMINATION

- A. Verification of Conditions: Verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for underlayment application in accordance with manufacturer's written recommendations.
 - 1. Ensure substrate is smooth, sound, clean and free of contaminants which may hinder adhesion.
 - 2. Visually inspect substrate in presence of Consultant.
 - 3. Inform Consultant of unacceptable conditions immediately upon discovery.
 - 4. Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Consultant.
 - 5. Starting application of hydraulic cement underlayment implies substrate conditions are acceptable for Work of this Section.

3.3 PREPARATION

- A. Mechanically remove friable substrate materials and repair areas to smooth finish using repair compound and methods in accordance with manufacturer's written recommendations.
- B. Mitigate moisture using residual moisture suppressor and methods in accordance with manufacturer's written recommendations.

3.4 MIXING

- A. Mix each 55 lbs bag with 6.6 to 6.8 quarts of water.
 - 1. Mix in accordance with manufacturer's written recommendations.
 - a. Do not over water.

2. Mix thoroughly for 3 minutes minimum using heavy duty drill mixer.
 - a. Add aggregates in accordance with manufacturer's written recommendations.
 - b. Mix thoroughly for 3 minutes minimum using heavy duty drill mixer.
 - c. Use mixture within 15 minutes of mixing.

3.5 APPLICATION

- A. Prime substrate in accordance with manufacturer's written recommendations.
- B. Pour self-leveling underlayment onto substrate and spread using smoothing trowel.
- C. Prime first layer only after it has reached final set and only when second layer is required.
 1. Use primer and methods in accordance with manufacturer's written recommendations.
 2. Pour second layer over primed first layer and spread using smoothing trowel.
 3. Ensure second layer does not exceed thickness of first layer.
- D. Ensure surfaces are even and level using pin leveler or spike roller.
- E. Prep and fill all identified cracks with PGH compound.

3.6 FIELD QUALITY CONTROL

- A. Manufacturer's Services:
 1. Have manufacturer review work involved in handling, application, protection, and cleaning of hydraulic cement underlayment and submit written reports in acceptable format to verify compliance of Work with Contract conditions.
 2. Manufacturer's Field Services: Provide manufacturer's field services consisting of product use recommendations and periodic site visits for product installation review in accordance with manufacturer's instructions.
 3. Schedule site visits to review work at stages listed:
 - a. After delivery and storage of hydraulic cement underlayment, and when preparatory work on which Work of this Section depends is complete, but before application begins.
 - b. During progress of work.
 - c. Upon completion of Work, after cleaning is carried out.
 - d. Obtain reports within three days of review and submit immediately to Architect prior to project substantial completion date..

3.7 CLEANING

- A. Immediately clean tools in water.
 1. Leave work area clean at end of each day.
- B. Upon completion, remove surplus materials, rubbish, tools and equipment.
- C. Collect recyclable waste and dispose of at appropriate recycling facilities.

3.8 PROTECTION

- A. Protect applied hydraulic cement underlayment from damage during construction.
 1. Place temporary wood planking over finished hydraulic cement underlayment work at traffic areas.
- B. Repair or replace adjacent materials damaged by application of hydraulic cement underlayment.

END OF SECTION

SECTION 07920 - JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes joint sealants for the following locations:
 - 1. Interior joints in vertical surfaces and horizontal non-traffic surfaces as indicated below:
 - a. All joints between different materials.
 - b. Other joints as indicated on the drawings.
 - 2. Interior joints in horizontal traffic surfaces as indicated below:
 - a. Control and expansion joints in cast-in-place concrete slabs.
 - b. Other joints as indicated on the drawings.

1.3 SYSTEM PERFORMANCE REQUIREMENTS

- A. Provide elastomeric joint sealants, produced and installed to establish and to maintain watertight and airtight continuous seals without causing staining or deterioration of joint substrates.
- B. Provide joint sealants for interior applications, produced and installed to establish and maintain continuous seals that are water resistant and cause no staining or deterioration of joint substrates.

1.4 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Product data from manufacturers for each joint sealant product required.
 - 1. Certification by joint sealant manufacturer: Sealants plus the primers and cleaners required for sealant installation comply with local regulations controlling use of volatile organic compounds.
- C. Samples for initial selection purposes in form of manufacturer's standard bead samples, consisting of strips of actual products showing full range of colors available, for each product exposed to view.
- D. Certificates from manufacturers of joint sealants attesting that their products comply with specification requirements and are suitable for the use indicated.
- E. Compatibility and adhesion test reports from elastomeric sealant manufacturer indicating that materials forming joint substrates and joint sealant backings have been tested for compatibility and adhesion with joint sealants. Include sealant manufacturer's interpretation of test results relative to sealant performance and recommendations for primers and substrate preparation needed to obtain adhesion.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed joint sealant applications similar in material, design, and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance.

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- 1 B. Single Source Responsibility for Joint Sealant Materials: Obtain joint sealant materials from a
2 single manufacturer for each different product required.

3
4 1.6 DELIVERY, STORAGE, AND HANDLING

- 5
6 A. Deliver materials to Project site in original unopened containers or bundles with labels indicating
7 manufacturer, product name and designation, color, expiration period for use, pot life, curing time,
8 and mixing instructions for multi-component materials.
9
10 B. Store and handle materials in compliance with manufacturer's recommendations to prevent
11 deterioration or damage due to moisture, high/low temperatures, contaminants, or other causes.

12
13 1.7 PROJECT CONDITIONS

- 14
15 A. Environmental Conditions: Do not proceed with installation of joint sealants under the following
16 conditions:
17 1. When ambient and substrate temperature conditions are outside the limits permitted by joint
18 sealant manufacturer.
19 2. When ambient and substrate temperature conditions are outside the limits permitted by joint
20 sealant manufacturer or below 40 deg F (4.4 deg C).
21 3. When joint substrates are wet.
22
23 B. Joint Width Conditions: Do not proceed with installation of joint sealants where joint widths are
24 less than allowed by joint sealant manufacturer for application indicated.
25
26 C. Joint Substrate Conditions: Do not proceed with installation of joint sealants until contaminants
27 capable of interfering with their adhesion are removed from joint substrates.

28
29 **PART 2 - PRODUCTS**

30
31 2.1 MATERIALS, GENERAL

- 32
33 A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible
34 with one another and with joint substrates under conditions of service and application, as
35 demonstrated by sealant manufacturer based on testing and field experience.
36
37 B. Colors: Provide color of exposed joint sealants to comply with the following:
38 1. Provide selections made by Architect from manufacturer's full range of standard colors for
39 products of type indicated.
40

41 2.2 ELASTOMERIC JOINT SEALANTS

- 42
43 A. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing elastomeric
44 sealants that comply with ASTM C 920 and other requirements indicated on each Elastomeric
45 Joint Sealant Data Sheet at end of this Section, including those requirements referencing ASTM C
46 920 classifications for Type, Grade, Class, and Uses.
47 1. Additional Movement Capability: Where additional movement capability is specified in
48 Elastomeric Joint Sealant Data Sheet, provide products with the capability, when tested for
49 adhesion and cohesion under maximum cyclic movement per ASTM C 719, to withstand the
50 specified percentage change in the joint width existing at time of installation and remain in
51 compliance with other requirements of ASTM C 920 for Uses indicated.
52

53 2.3 JOINT SEALANT BACKING

- 1 A. General: Provide sealant backings of material and type that are non-staining; are compatible with
2 joint substrates, sealants, primers and other joint fillers; and are approved for applications
3 indicated by sealant manufacturer based on field experience and laboratory testing.
4
5 B. Plastic Foam Joint Fillers: Preformed, compressible, resilient, non-staining, non-waxing, non-
6 extruding strips of flexible plastic foam of material indicated below and of size, shape, and density
7 to control sealant depth and otherwise contribute to producing optimum sealant performance:
8 1. Proprietary, reticulated, closed-cell polymeric foam, non-out-gassing, with a density of 2.5 pcf,
9 tensile strength of 35 psi per ASTM D 1623, and water absorption less than 0.02 gms/cc per
10 ASTM C 1083.
11
12 C. Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant
13 manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint
14 surfaces at back of joint where such adhesion would result in sealant failure. Provide
15 self-adhesive tape where applicable.
16

17 2.4 MISCELLANEOUS MATERIALS

- 18
19 A. Primer: Material recommended by joint sealant manufacturer where required for adhesion of
20 sealant to joint substrates indicated, as determined from preconstruction joint sealant-substrate
21 tests and field tests.
22
23 B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants
24 and sealant backing materials, free of oily residues or other substances capable of staining or
25 harming in any way joint substrates and adjacent nonporous surfaces, and formulated to promote
26 optimum adhesion of sealants with joint substrates.
27
28 C. Masking Tape: Non-staining, nonabsorbent material compatible with joint sealants and surfaces
29 adjacent to joints.
30

31 PART 3 - EXECUTION

32 3.1 EXAMINATION

- 33
34
35 A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with
36 requirements for joint configuration, installation tolerances, and other conditions affecting joint
37 sealant performance. Do not proceed with installation of joint sealants until unsatisfactory
38 conditions have been corrected at no cost to project by the responsible contractor.
39

40 3.2 PREPARATION

- 41
42 A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply
43 with recommendations of joint sealant manufacturer and the following requirements:
44 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint
45 sealant, including dust, paints (except for permanent, protective coatings tested and approved
46 for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease,
47 waterproofing, water repellents, water, surface dirt, and frost.
48 2. Clean concrete and similar porous joint substrate surfaces by brushing, grinding, blast
49 cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound
50 substrate capable of developing optimum bond with joint sealants. Remove loose particles
51 remaining from above cleaning operations by vacuuming or blowing out joints with oil-free
52 compressed air.
53 3. Remove laitance and form release agents from concrete.

- 1 4. Clean metal and other nonporous surfaces with chemical cleaners or other means that do not
2 stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
3
4 B. Joint Priming: Prime joint substrates where indicated or where recommended by joint sealant
5 manufacturer based on preconstruction joint sealant-substrate tests or prior experience. Apply
6 primer to comply with joint sealant manufacturer's recommendations. Confine primers to areas of
7 joint sealant bond; do not allow spillage or migration onto adjoining surfaces.
8
9 C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining
10 surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning
11 methods required to remove sealant smears. Remove tape immediately after tooling without
12 disturbing joint seal.

13 14 3.3 INSTALLATION OF JOINT SEALANTS

- 15
16 A. General: Comply with joint sealant manufacturer's printed installation instructions applicable to
17 products and applications indicated, except where more stringent requirements apply.
18
19 B. Sealant Installation Standard: Comply with recommendations of ASTM C 1193 for use of joint
20 sealants as applicable to materials, applications, and conditions indicated.
21
22 C. Installation of Sealant Backings: Install sealant backings to comply with the following
23 requirements:
24 1. Install joint fillers of type indicated to provide support of sealants during application and at
25 position required to produce the cross-sectional shapes and depths of installed sealants
26 relative to joint widths that allow optimum sealant movement capability.
27 a. Do not leave gaps between ends of joint fillers.
28 b. Do not stretch, twist, puncture, or tear joint fillers.
29 c. Remove absorbent joint fillers that have become wet prior to sealant application and
30 replace with dry material.
31 2. Install bond breaker tape between sealants where backer rods are not used between sealants
32 and joint fillers or back of joints.
33
34 D. Installation of Sealants: Install sealants by proven techniques that result in sealants directly
35 contacting and fully wetting joint substrates, completely filling recesses provided for each joint
36 configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths
37 that allow optimum sealant movement capability. Install sealants at the same time sealant
38 backings are installed.
39
40 E. Tooling of Nonsag Sealants: Immediately after sealant application and prior to time skinning or
41 curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate
42 air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess
43 sealants from surfaces adjacent to joint. Do not use tooling agents that discolor sealants or
44 adjacent surfaces or are not approved by sealant manufacturer.
45 1. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise noted.
46 2. Use masking tape to protect adjacent surfaces of recessed tooled joints.

47 48 3.4 CLEANING

- 49 A. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods
50 and with cleaning materials approved by manufacturers of joint sealants and of products in which
51 joints occur.
52
53

1 3.5 PROTECTION

- 2
3 A. Protect joint sealants during and after curing period from contact with contaminating substances
4 or from damage resulting from construction operations or other causes so that they are without
5 deterioration or damage at time of Substantial Completion. If, despite such protection, damage or
6 deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so
7 that and installations with repaired areas are indistinguishable from original work.
8

9 **SEALANT SCHEDULE**

- 10
11 A. **Interior joints in field-painted vertical and overhead surfaces, at perimeter of all hollow**
12 **metal frames; in gypsum drywall, plaster, concrete, and concrete masonry; and all other**
13 **interior joints not indicated otherwise.**
14 A. BasePolymer: Acrylic-Emulsion/Silicone, mildew-resistant, complying with ASTM C 834
15 (and ASTM C 920)
16 B. Type: S (single component).
17 C. Grade: NS (nonsag).
18 D. Class:25
19 E. Additional Movement Capability: 5 percent movement in extension, 5 percent in compression.
20 F. Use[s] Related to Exposure: NT (nontraffic).
21 G. Uses Related to Joint Substrates: M, G, A, and, as applicable to joint substrates indicated.
22 H. Use O Joint Substrates: Coated glass, color anodized aluminum, aluminum coated with a
23 high-performance coating, galvanized steel, brick, ceramic tile, and wood.
24 I. Products:
25 1. Sonneborn "Sonolac"
26 2. Pecora "AC-20 + Silicone"
27 3. Tremco "Acrylic Latex 834"
28 4. Dow Corning Corp. "Performance Plus Silicone Sealant"
29
30 B. **Exterior and interior joints in horizontal surfaces of concrete; between metal and**
31 **concrete, mortar, and masonry.**
32 A. One-Part, Pourable, Urethane Sealant for Use T
33 B. Type: S
34 C. Grade: P
35 D. Class: 25
36 E. Additional Movement Capability: 25 percent movement in extension and 25
37 percent in compression.
38 F. Uses Related to Joint Substrates: M, G, A, and, as applicable to joint substrates
39 indicated.
40 G. Use O Joint Substrates: Color anodized aluminum, aluminum coated
41 with a high-performance coating, galvanized steel, brick, ceramic tile, and wood.
42 H. Products:
43 1. Mameco "Vulkem 45"
44 2. Pecora "NR-201 Urexpan"
45 3. Sonneborn "Sonolastic SL 1"
46 4. Tremco Inc. "THC-901"
47
48

49 **END OF SECTION 07920**

SECTION 09651 RUBBER FLOOR TILE & BASE

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.2 DESCRIPTION OF WORK

A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:

1. Resilient tile flooring for commercial traffic.
2. Substrate preparation.
3. Rubber Base and accessories.

B. References (Industry Standards):

1. American Association of Textile Chemists and Colorists (AATCC):
 - a. AATCC 134 Electrostatic Propensity of Carpets
2. American National Standards Institute (ANSI):
 - a. ANSI ESD S97.2 Floor Materials and Footwear – Voltage Measurement on a Person
3. ASTM International (ASTM):
 - a. ASTM C518 Standard Test Method for Steady State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
 - b. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension
 - c. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine
 - d. ASTM D2240 Standard Test Method for Rubber Property – Durometer Hardness
 - e. ASTM D3389 Standard Test Method for Coated Fabrics Abrasion Resistance (Rotary Platform, Double Head Abrader)
 - f. ASTM D6499 Standard Test Method for the Immunological Measurement of Antigenic Protein in Natural Rubber and its Products
 - g. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
 - h. ASTM E648 Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source
 - i. ASTM E662 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials
 - j. ASTM E1745 Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs
 - k. ASTM E2179 Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission Through Concrete Floors
 - l. ASTM E2180 Standard Test Method for Determining the Activity of Incorporated Antimicrobial Agent(s) in Polymeric or Hydrophobic Materials
 - m. ASTM F150 Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring
 - n. ASTM F155 Method of Test for Temper of Strip and Sheet Metals for Electronic Devices
 - o. ASTM F386 Standard Test Method for Thickness of Resilient Flooring Materials Having Flat Surfaces
 - p. ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring

- q. ASTM F925 Standard Test Method for Resistance to Chemicals of Resilient Flooring
- r. ASTM F970 Standard Test Method for Static Load Limit
- s. ASTM F1344 Standard Specification for Rubber Floor Tile
- t. ASTM F1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring
- u. ASTM F1514 Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color
- v. ASTM F1515 Standard Test Method for Measuring Light Stability of Resilient Flooring by Color Change
- w. ASTM F1859 Standard Specification for Rubber Sheet Floor Covering Without Backing
- x. ASTM F1860 Standard Specification for Rubber Sheet Floor Covering With Backing
- y. ASTM F1861 Standard Specification for Resilient Wall Base
- z. ASTM F2055 Standard Test Method for Size and Squareness of Resilient Floor Tile by Dial Gage Method
- aa. ASTM F2169 Standard Specification for Resilient Stair Treads
- bb. ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes
- cc. ASTM F2199 Standard Test Method for Determining Dimensional Stability of Resilient Floor Tile after Exposure to Heat
- dd. ASTM F3010 Standard Practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings
- ee. ASTM G21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
- 4. European Norm (FTM):
 - a. FTM 101 C 4046 Static Decay.
- 5. International Organization for Standardization (ISO):
 - a. ISO 140 Measurement of sound insulation in buildings and of building elements
- 6. National Fire Protection Association (NFPA):
 - a. NFPA 253 Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Energy Source
 - b. NFPA 258 Test Method for Specific Density of Smoke Generated by Solid Materials

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data, installation guide and maintenance guide for each material and accessory proposed for use.
- B. Samples: Submit three representative samples of each product specified for verification.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Provide resilient flooring manufactured by a firm with a minimum of 10 years' experience with resilient flooring of type equivalent to those specified.
 - 1. Manufacturer's quality management system must have ISO 9001:2000 approval.
 - 2. Provide resilient flooring products, including wall base, accessories and subfloor preparation products from one manufacturer to ensure color matching and compatibility.
 - 3. Manufacturer shall be capable of providing technical training and technical field service representation.
- B. Installer Qualifications: Acceptable to manufacturer of resilient flooring or INSTALL (International Standards & Training Alliance) resilient certified for the requirements of the project with five (5) years experience.
- C. Sustainable Design Requirements:
 - 1. ISO 14001 Environmental Management Systems certification.

2. Construction waste take back program for the purpose of reducing jobsite waste by taking back uninstalled waste flooring. Details of the nora® program are available at www.nora.com/us.
3. Flooring surfaces that are easily cleaned and do not require coatings and stripping, or use chemicals that may be hazardous to human health.
4. Supply all required products that are CA 01350 compliant.
5. Flooring that is free of materials known to be teratogenic, mutagenic or carcinogenic.
6. Flooring that contains no polyvinyl chloride or plasticizers.
7. Flooring that contains no halogens.
8. Flooring that contains no asbestos.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in labeled packages. Store and handle in strict compliance with manufacturer's recommendations. Protect from damage due to weather, excessive temperatures, and construction operations.
- B. Deliver materials sufficiently in advance of installation to condition materials to the required temperature for 48-hours prior to installation.

1.6 PROJECT CONDITIONS

- A. Maintain temperature and humidity at service levels or the ambient temperature must remain steady ($\pm 10^{\circ}\text{F}$) and be between 59°F and 80°F for at least 48-hours prior, during and 72-hours after installation. .) The ambient relative humidity is recommended to be $50\% \text{ RH} \pm 10\%$; however, dew point must be avoided.

1.7 WARRANTY

- A. Provide manufacturer's standard limited warranty for wear, defect and conductivity.

1.8 EXTRA ATTIC STOCK

- A. Provide in unopened cartons minimum 10 squares of each style, color and type (non-ntx and ntx); for each school.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURER

- A. Basis-of-Design: nora systems, Inc., 9 Northeastern Blvd., Salem, NH 03079; telephone 800-332-NORA or 603-894-1021; fax 603-894-6615.
- B. Pre Bid approved equals.

2.2 RUBBER FLOOR TILE FOR COMMERCIAL TRAFFIC

- A. Rubber Floor Tile:

Schedule of Rubber Floor Tile

Northwest High School (SMNW)

Basis of Design Norament, Satura

First Floor : nTx installation

Second Floor: manufacturer's approved adhesive installation

Color-1: CYGNUS 5105

Color-2: ARA 5110

Color-3: JUPITER 5120

Color-4: CASTOR 5111

South High School (SMS)

Basis of Design Norament, Satura
nTx installation

Color-1: ARA 5110

Color-2: CASTOR 5111

Color-3: AQUILA 5124

Product Name:	norament® satura, Article 1880
ASTM Specification: ASTM F1344 Standard Specification for Rubber Floor Tile	Type IB and Grade 2
Limited Wear Warranty:	10 years
Material:	nora® vulcanized rubber compound 926 with environmentally compatible color pigments that are free of toxic heavy metals like lead, cadmium or mercury
Composition:	Homogeneous rubber compound with a ran- dom scattered design
Color:	32 standard colors
Surface:	Hammered
Back of Tile/Sheet/Nosing:	Double-sanded smooth
Material Size (ASTM F2055): ± 0.02 inches (± 0.5mm) is required	~39.53 inches by ~39.53 inches (1004mm by 1004mm)
Squareness (ASTM F2055): ± 0.010 inches (± 0.254mm) is required	Meets requirements
Thickness (ASTM F386): + 0.015/-0.005 inches (+ 0.381/- 0.127mm) is re- quired	~0.14 inches (3.5mm)
Dimensional Stability (ASTM F2199): ≤ 0.15% in both directions is required	Meets requirements
Flammability (E648/NFPA 253): ≥ 0.45 watts/sq. cm for Class 1 is required	NBSIR 75 950, 0.92

Smoke Density (ASTM E662/NFPA 258): < 450 is required CAN/ULC-S102.2:	NBS, 256 (flaming) and 138 (non-flaming) Surface Burning, FSC1 of 70 and SD of 470
Burn Resistance:	Resistant to cigarette and solder burns
Slip Resistance (ASTM D2047): ≥ 0.5 is required Bacteria Resistance (ASTM E2180/ASTM G21): VOC's:	Static coefficient of friction, Neolite dry 0.99, Neolite wet 0.95 (not recommended for ramps) Resistant to bacteria, fungi, and micro-organism activity This flooring is GREENGUARD Gold Certified for Low VOC Emissions, Blue Angel Certified and CA 01350 compliant
Latex Allergies (ASTM D6499): Sound Absorption (ASTM E2179/ISO 140): Sound Generation:	Inhibition Elisa, results are below detection level Δ IIC 11, Δ Lw 11 dB (compare only Δ values) 66.3 dBA, 68.5 dBC and 19.6 Sones, Independently tested
Hardness (ASTM D2240): ≥ 70 is required Static Load (ASTM F970): ≤ 0.005 inches with 250 lbs. is required Rolling Load Limit:	Shore type "A", 82 Residual compression of 0.005 inches with 800 lbs. ≤ 850 lbs. / sq. inch
Abrasion Resistance (ASTM D3389): ≤ 0.035 oz. (1.0g) is required Oil & Grease Resistance:	1.1 lbs. (500g) load on H-18 wheel with 1000 cycles, 0.002 oz. (0.05g) weight loss Yes
Heat Resistance (ASTM F1514): Avg. ΔE ≤ 8.0 is required Static Generation (AATCC 134): Thermal Transmission (ASTM C518): Cleaning:	Easily achieved with all batches and regular maintenance < 2000 Volts at 20% RH R-value of -0.90 Cleaned and maintained effectively using water, nora® cleaning pads and a suitable cleaning machine, without the use of any factory and/or field-applied coatings. Also without using any chemicals that may be hazardous or containing any teratogenic, mutagenic or any other ingredients known to be carcinogenic.

Shine:	Higher shine achieved by buffing without any artificial topical applied coatings
Stain Removal:	Samples of the product must be provided for stain removal testing by the owner. Sample size should be ~1m ² , pre-cleaned by manufacture per published recommendations. Samples must have no coatings, sealers, floor finish or other manually or mechanically applied finish on the surface of the product. Stain testing must consist of application of common healthcare related disinfectants and chemicals to include, but not limited to, Beta-dine, Methylene Blue, Silver Nitrate and alcohol based hand sanitizer. Duration of test period must be no less than one week. Removal of chemicals must be in accordance with manufacturers published cleaning and maintenance recommendations.
Substrate Preparation:	Per ASTM F710 and the nora Installation Guide for second floor at SMNW and nora® nTx Installation Guide for first floor SMNW and SMS as appropriate.

2.3 WALL BASE AND ACCESSORIES

A. Wall Base: Rubber products complying with F-1861, Pinnacle Series, Type TS, top set, continuous rolled goods:

1. Height: 4 and 6 inches, and as required by field conditions. Contractor verify prior to submittal process.
2. Thickness: 1/8"
3. Cove design for all flooring, unless otherwise noted.
4. Subject to compliance with requirements wall base may be incorporated in the Work include, but not limited to:, Roppe, Armstrong or approved equal.
5. Design: Architect may select two (2) colors unless indicated to match

B. Provide transition/reducing strips tapered to meet abutting materials including but not limited to:
Per ASTM F710 and the nora Installation Guide for second floor at SMNW and nora® nTx Installation Guide for first floor SMNW and SMS as appropriate.

1. Transition between resilient flooring and resinous flooring.
2. Transition between resilient flooring and carpet.
3. Transition between resilient flooring and exposed concrete slab.
4. Transition between resilient flooring and rubber flooring.
5. And all other locations not listed, but may be required by existing construction.

2.4 UNIVERSAL ACRYLIC PRIMER

A. Schonox VD or approved equal by Nora.

- 1.. First coat 3:1 and second coat 1:1.

2.5 SELF-LEVELING

A. Schonox ZM Moisture resistant or approved equal by Nora.

1. Thickness varies 1/16 inch to 3/8 inch; with aggregate up to 7/8 inch if required.

2.6 SKIM COAT

A. Schonox SL or approved equal by Nora.

1. Skim coat moisture resistant self-leveling featheredge as required.

EXECUTION

3.1 FLOORING CONTRACTOR RESPONSIBILITIES

A. Supply a safe, climate controlled building and subfloor as detailed in the nora Installation Guide (available at www.nora.com/us).

B. A subfloor that meets the requirements of ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring is required, or as detailed in **the nora Installation Guide for second floor at SMNW and nora® nTx Installation Guide for first floor SMNW and SMS as appropriate.**

C. A secure storage area that is maintained permanently or temporarily at ambient service temperature and humidity (except walk in freezers or similar), or 68°F ± 5° F and 50% ± 10% relative humidity, for at least 48-hours prior to and during the application of the flooring, so the flooring contractor can acclimate the flooring materials is required.

D. An installation area that is weather tight and maintained either permanently or temporarily at ambient service temperature and humidity (except walk in freezers or similar), or 68°F ± 5° F and 50% ± 10% relative humidity, for at least 48-hours prior to, during and 72-hours after the application of the flooring is required.

E. Areas with direct prolonged exposure to sunlight should be protected with the use of Low E glass doors and windows or facades.

F. Areas of the flooring that are subject to direct sunlight through doors or windows should have them covered using blinds, curtains, cardboard or similar for the time of the installation and 72-hours after the installation to allow the adhesive to cure. Note: These areas should be installed using wet adhesives only.

G. Prevent all traffic for a minimum of 12-hours and rolling loads for 72-hours to allow the adhesive to cure. If required, after 12-hours protect the flooring from damage during construction operations using Masonite, plywood or a similar product, ensuring first that the flooring surface is free of all debris. Lay panels so that the edges form a butt joint and tape the joint to prevent both movement and debris entrapment underneath them. Inspect immediately before covering and after removal for final acceptance.

H. Have the flooring cleaned no sooner than 72-hours (unless given written permission from the nora® Technical Department) after the installation using either the nora pro clean® system or a standard method as detailed in the appropriate nora® Maintenance Guide.

3.2 FLOORING CONTRACTOR SPECIFIC RESPONSIBILITIES

A. Provide trained installers that have at least one of the following:

1. Approved by nora systems, Inc. for all of the requirements of the project or INSTALL (International Standards & Training Alliance) certified for the requirements of the project.

2. An effective installation manager, to manage the project, installers, and ensure that all of the required procedures are followed as detailed in the nora Installation Guide (available at www.nora.com/us).

B. Follow all requirements in **the nora Installation Guide for second floor at SMNW and nora® nTx Installation Guide for first floor SMNW and SMS as appropriate.**

C. Concrete shall be prepared, removing existing underlayment by scraping and grinding. Prime floor with Schonox VD primer, first coat 3:1 and second coat 1:1. Mix and pour Schonox ZM moisture resistant self-leveling at 3/16 inch to ¼ inch and with aggregate to 7/8 inch if required. Touch up if required with Schonox SL skim coat moisture resistant floor patch to featheredge.

D. Provide Initial Maintenance per Nora Maintenance Guide. Provide written confirmation from Nora, that Initial Maintenance was completed per manufacturer's requirements.

END OF SECTION