Contractor Name: D Square Construction LLC Address: 107 W. Sahuaro St Tucson, AZ 85705 Phone/Fax: 520-748-9371/888-543-8500

Send to: <u>harry.seballos@va.gov</u>

REQUEST FOR INFORMATION (RFI)			
	600-13-114	DEI MIIMDED.	001
PROJECT NUMBER:	600-13-114	RFI NUMBER:	
PROJECT NAME:	Upgrade Restrooms	DATE REQUESTED:	11/07/2014
			Resinous Epoxy Base Spec
SOLICITATION NUMBER:	VA-262-15-B-0044	REFERENCE:	
DRAWING:		SPECIFICATION SECTION:	09 67 23.20
	JLEM(S) OR INFORMA	ATION BEING REQUESTED	I
The VA Specifications, Table of Contents for this solicitation lists Section 09 67 23.20 – Resinous Epoxy Base With Quartz Broadcast (RES 2A). We did not find this Section in the Specification Manual. Will the VA provide this Specification Section?			
PROJECT MANAGER'S RESPONSE			
Refer to attached Section 09 67 23 Rev2 (1)			
TRACKING NUMBER:			_
VA PROJECT ENGINEER/M MELEK KULKARNI, (562) 82		DATE: 11-20-	14

SECTION 09 67 23

RESINOUS FLOORING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies a seamless flooring system with integral base.
- B. Flooring consists of epoxy resin, aggregate, and finish coats for non-slip finish.

1.2 RELATED WORK

A. Color and room finish schedule: Refer to Room Finish Schedule indicted on the Drawings.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturer's Literature and Data:
 - Description of product to be provided; technical data showing compliance with specifications.
 - 2. Application and installation instructions, including proposed deviations from specifications.
- C. Samples:
 - 1. Each color specified in Room Finish Schedule indicted on the Drawings.
 - 2. Sample 300 mm (12-inch) square in each finish specified.
 - 3. Sample showing construction from substrate to finish surface in thickness specified.
- D. Certification and Approval:
 - 1. Manufacturer's certification of material compliance.
 - 2. Manufacturer's approval of installers.
 - 3. Contractor's certificate of compliance with Quality Assurance requirements.
- E. Warranty: Manufacturers warranty of materials and installation.

1.4 QUALITY ASSURANCE

- A. Single Source Responsibility:
 - Obtain primary resinous flooring materials including primers, resins, hardening agents, finish or sealing coats from a single manufacturer.
 - 2. Provide secondary materials only of type and from source

096723 - 1

recommended by manufacturer of primary materials.

- B. Installer trained and approved by manufacturer of primary material and having completed at least five projects of similar size and complexity.
- C. Pre-Installation Conference
 - 1. Arrange a meeting not less than thirty days prior to starting work.
 - 2. Attendance
 - a. Contractor
 - b. Resident Engineer
 - c. Manufacturer and Installer's Representative

1.5 MATERIAL PACKAGING DELIVERY AND STORAGE

- A. Deliver materials to the site in original sealed packages or containers, clearly marked with the manufacturer's name or brand, type and color, production run number and date of manufacture.
- B. Protect materials from damage and contamination in storage.
- C. Maintain temperature of storage area between 15° C and 32° C (60° F and 90° F) $^{\cdot}$
- D. Package materials in factory pre-weighed and in single, easy to manage batches sized for ease of handling and mixing proportions from entire package or packages.

1.6 WARRANTY

- A. Work subject to the terms of the Article "Warranty of Construction" FAR clause 52.246-21.
- B. Extend warranty period to three years.

1.7 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - B221-06 Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes
 - C267-01 (R2006) Chemical Resistance of Mortars, Grouts, and Monolithic Surfacings
 - 3. C413-01 (R2006) Absorption of Chemical-Resistant Mortars, Grouts, and Monolithic Surfacings, and Polymer Concretes
 - 4. C580-02 Flexural Strength and Modulus of Elasticity of Chemical Resistant Mortars, Grouts, Monolithic Surfacings and Polymer Concretes
 - 5. C722-04 Chemical-Resistant Resin Monolithic Surfacing

- 6. C811-98 (R2003) Surface Preparation of Concrete for Application of Chemical-Resistant Resin Monolithic Surfacings
- 7. C882-05 Bond Strength of Epoxy-Resin Systems Used with Concrete by Slant Shear
- 8. D2047-04 Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine
- C. National Association of Architectural Metal Manufacturers (NAAMM):
 - 1. AMP 501 Finishes for Aluminum

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. Epoxy resinous flooring includes concrete epoxy primer, colored quartz aggregate epoxy resin mortar, clear epoxy sealer coat, and finish coat for non-slip finish.
- B. System resistant to chemicals and abrasion.

2.2 EPOXY FLOORING SYSTEM

- A. Conform to ASTM C722, Type A, Epoxy resin, quartz aggregate.
- B. Physical Properties of flooring system addition to C722 when tested as follows:

Property	Test	Value
Hardness	ASTM D2240 Shore Durometer	75-80
Bond	ASTM C882 Bonding epoxy flooring to hardened concrete	min 400 psi
Water Absorption	ASTM C413	max 0.1 percent
Abrasion Resistance	ASTM D4060 Taber Abrader CS-17 wheel, 1000 gm load; 1000 cycle	max 0.10 gms. weight loss
Flexural Strength	ASTM C580	min 2200 psi
Extent of Burning extinguishing Heat Resistant	ASTM D635 For continuous exposure min 140 deg. F For intermittent spills min 200 deg. F	max 0.25 inch self No Effect No Effect
Coefficient of Friction	ASTM D 2047	0.7
Chemical Resistance of the following: Acetic acid Ammonium hydroxide Citric Acid Fatty acid Motor	ASTM C267 5 percent 10 percent 50 percent	No Effect

Oil, 20W 10 percent Hydrochloric acid 10 percent Salt water 10 percent Sodium Hydroxide 5 percent Sulfuric acid Trisodium phosphate Urine Feces Hydrogen peroxide 28 percent Distilled Water Sodium Hypochloride 5.28 percent

- C. Primer, Coloring, Sealer, and Finish coats as standard with manufacture of flooring system.
- D. Base cap: Extruded aluminum, clear anodized finish unless specified otherwise in Room Finish Schedule indicted on the Drawings.

2.3 BASE CAP STRIP

- A. Aluminum, Extruded: ASTM B221, Alloy 6063-T6.
- B. Shape for 5 mm (3/16 inch) depth of base material, "J" configuration.
- C. Finish:
 - 1. Finish exposed surfaces in accordance with NAAMM Metal Finishes Manual.
 - 2. Aluminum: NAAMM Amp 501:
 - a. Clear anodic coating, AA-C22A41 chemically etched medium matte, with Architectural Class 1, 0.7 mils or thicker.
 - b. Colored anodic coating, AA-C22A42, chemically etched medium matte with Architectural Class 1, 0.7 mils or thicker.

PART 3 - EXECUTION

3.1 PROJECT CONDITIONS

- A. Maintain temperature of materials above 21° C (70° F), for 48 hours before installation.
- B. Maintain temperature of rooms where work occurs, between 21° C and 32° C (70° F and 90° F) for at least 48 hours, before, during, and 24 hours after installation. Maintain temperature at least 21° C (70° F) thereafter.
- C. Do not install materials until building is permanently enclosed and wet construction is complete, dry, and cured.
- D. Concrete substrate cured and not less than 30 days old.
- E. Area free of other trades during and for a period of 24 hours after installation.

3.2 INSTALLATION REQUIREMENTS

- A. The respective manufacturer's instructions for application and installation will be considered for use when approved by the Resident Engineer.
- B. Submit proposed installation deviation from this specification to the Resident Engineer indicating the differences in the method of installation.

3.3 PREPARATION

- A. Prepare surface in accordance with ASTM C811 except where specific manufacturers instructions supersede.
- B. Mechanically remove bond inhibiting materials and loose or laitance materials to ensure bond.
- C. Prepare wall and set base cap mold level.
 - 1. Fill voids within the height of the wall where base is applied even with the wall surface.
 - 2. Grind, sand, or cut away protrusions.

3.4 APPLICATION

- A. Mix and apply each component of resinous flooring system in compliance with manufacturer's specifications to produce a uniform monolithic flooring surface of 5 mm (3/16 inch) minimum thickness.
- B. Turn flooring up for coved 100 mm (4-inch) high base at vertical wall surfaces and penetrations. Cove joint with floor; 6 mm (1/4 inch) radius. Round interior and external corners.
- C. Apply primer over prepared substrate at manufacturers specified rate. Coordinate timing of primer application with application of troweled mortar to ensure optimum adhesion between resinous flooring materials and substrate.
- D. Uniformly spread mortar over substrate adjusted to manufacturer's recommended maximum thickness to plane line of floor.
- E. Trowel finish for smooth surface on base and coved surface.
- F. Grout mortar surface as specified by manufacturer and broad cast colored quartz aggregate uniformly distributed for non-slip texture on floors to within one inch of base cove horizontal edge.
- G. Apply a clear finish coat.

3.5 CURING, PROTECTION AND CLEANING

- A. Cure resinous flooring materials in compliance with manufacturer's directions, taking care to prevent contamination during stages of application and prior to completion of curing process.
- B. Close area of application for a minimum of 24 hours.

- C. Protect resinous flooring materials from damage and wear during construction operation.
 - 1. Cover flooring with kraft paper.
 - Cover paper with 6 mm (1/4 inch) thick hardboard, plywood, or particle board where area is in foot or vehicle traffic pattern, rolling or fixed scaffolding and overhead work occurs.
- D. Remove temporary covering and clean resinous flooring just prior to final inspection. Use cleaning materials and procedures recommended by resinous flooring manufacturer.

3.6 TOLERANCE

- A. From line of plane: Maximum 3 mm (1/8 inch) in total distance of flooring and base.
- B. From radius of cove: Maximum of 3 mm (1/8 inch) plus or 1.6 mm (1/16-inch) minus.

- - - E N D - - -

REQUEST FOR INFORMATION (RFI)			
PROJECT NUMBER:	600-13-114	RFI NUMBER:	002
PROJECT NAME:	Upgrade Restrooms	DATE REQUESTED:	11/13/2014
SOLICITATION NUMBER:	VA-262-15-B-0044	REFERENCE:	TB Test
	V/ 202 15 D 0044		01 00 00 1.1
DRAWING: SPECIFICATION SECTION: DESCRIPTION OF PROBLEM(S) OR INFORMATION BEING REQUESTED			
Section 01 00 00, Part 1.1 – H TB Test Required Please confirm that all employees to the General Contractor and Subcontractors for this project will be required to provide written certification of a negative screening reaction TB test performed within 90 days prior to assignment.			
PROJECT MANAGER'S RESPONSE			
All employees of the Contractor and Subcontractor will be required to have TB test since the work is in patient care areas.			
TRACKING NUMBER:		AMENDMEN	۲ NUMBER:
VA PROJECT ENGINEER/M MELEK KULKARNI, (562) 82		DATE: 11-20-	14

REQUEST FOR INFORMATION (RFI)			
PROJECT NUMBER:	600-13-114	RFI NUMBER:	003
			11/13/2014
PROJECT NAME:	Upgrade Restrooms	DATE REQUESTED:	
			EDMS
SOLICITATION NUMBER:	VA-262-15-B-0044	REFERENCE:	
			01 00 00 1.4
DRAWING:		SPECIFICATION SECTION:	
DESCRIPTION OF PROP	SLEIVI(S) OR INFORMA	TION BEING REQUESTED	
(EDMS) will be required for all documents for this project. Please provide information do the Contractor may determine the purchase cost for this software and if there is any monthly charge.			
PROJECT MANAGER'S RESPONSE			
Delete Section 01 00 00 Part 1.4-d.7. Add attached Section 01 33 23 Submittals.			
TRACKING NUMBER:		AMENDMEN	T NUMBER:
VA PROJECT ENGINEER/M MELEK KULKARNI, (562) 8		DATE:	

SECTION 01 33 23 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

For the purposes of this contract, samples including laboratory samples to be tested, test reports, certificates, and manufacturers' literature and data shall also be subject to the previously referenced requirements. The following text refers to all items collectively as SUBMITTALS.

1. General Requirements:

- A. All submittals except color samples, color charts or physical material samples shall be made via an electronic, web-based exchange service.
 - i. Contractor shall pay for this service. Full price of providing this service should be included in the contractor's bid.
 - ii. Administrative control of the project account shall be transferred to the government after notice to proceed.
- B. Submit for approval, all of the items specifically mentioned under the separate sections of the specification, with information sufficient to evidence full compliance with contract requirements. Materials, fabricated articles and the like to be installed in permanent work shall equal those of approved submittals. After an item has been approved, no change in brand or make will be permitted unless:
 - i. Satisfactory written evidence is presented to, and approved by Contracting Officer, that manufacturer cannot make scheduled delivery of approved item or;
 - ii. Item delivered has been rejected and substitution of a suitable item is an urgent necessity or;
 - iii. Other conditions become apparent which indicates approval of such substitute item to be in best interest of the Government.
- C. Contractor shall forward submittals in sufficient time to permit proper consideration and approval action by Government. Time submission to assure adequate lead time for procurement of contract required items. Delays attributable to untimely and rejected submittals (including any laboratory samples to be tested) will not serve as a basis for extending contract time for completion.
 - i. Allow 10 working days for A/E review.
 - ii. Allow 10 working days for VAMC Engineering review.

- D. Submittals will be reviewed for compliance with contract requirements by Architect-Engineer, and action thereon will be taken by COR on behalf of the Contracting Officer.
- E. Upon receipt of submittals, Architect-Engineer will assign a file number thereto.Contractor, in any subsequent correspondence, shall refer to this file and identification number to expedite replies relative to previously approved or disapproved submittals.
- F. The Government reserves the right to require additional submittals, whether or not particularly mentioned in this contract.
- G. Electronic submittal service requirements:
 - i. Web-based (not local or ftp server) service.
 - ii. Automatic email notification for new submittals and for submittals approaching review deadline.
 - Tracking and exchange of RFI/ITC/Logs and other project related documents in addition to submittals and shop drawings.
 - iv. Organized storage of electronic submittals that is accessible by project team members at any time and from any location.
 - v. Provide a complete record of all documents submitted or reviewed during the construction project at closeout on CD or DVD.
 - vi. Submittal files must be readable. In general, a resolution of 300dpi or greater should be used when scanning documents.
- 2. Schedules called for in specifications and shown on shop drawings shall be submitted for use and information of Department of Veterans Affairs and Architect-Engineer. However, the Contractor shall assume responsibility for coordinating and verifying schedules. The Contracting Officer and Architect- Engineer assumes no responsibility for checking schedules or layout drawings for exact sizes, exact numbers and detailed positioning of items.
 - A. Submittals must be submitted by General Contractor only and shipped prepaid.
 Contracting Officer assumes no responsibility for checking quantities or exact numbers included in such submittals.
 - i. Submit samples required by Section 09 06 00, SCHEDULE FOR FINISHES, in quadruplicate. Submit other samples in single units unless otherwise specified.

Submit shop drawings, schedules, manufacturers' literature and data, and certificates in quadruplicate, except where a greater number is specified.

- ii. Submittals will receive consideration only when covered by a transmittal letter signed by Contractor. Letter shall be sent via first class mail and shall contain the list of items, name of Medical Center, name of Contractor, contract number, applicable specification paragraph numbers, applicable drawing numbers (and other information required for exact identification of location for each item), manufacturer and brand, ASTM or Federal Specification Number (if any) and such additional information as may be required by specifications for particular item being furnished. In addition, catalogs shall be marked to indicate specific items submitted for approval.
- iii. A copy of letter must be enclosed with items, and any items received without identification letter will be considered "unclaimed goods" and held for a limited time only.
- iv. Each sample, certificate, manufacturers' literature and data shall be labeled to indicate the name and location of the Medical Center, name of Contractor, manufacturer, brand, contract number and ASTM or Federal Specification Number as applicable and location(s) on project.

3. Procedures:

- A. Required certificates shall be signed by an authorized representative of manufacturer or supplier of material, and by Contractor.
- B. In addition to complying with the applicable requirements specified in preceding Article 1.9, samples which are required to have Laboratory Tests (those preceded by symbol "LT" under the separate sections of the specification shall be tested, at the expense of Contractor, in a commercial laboratory approved by Contracting Officer.
- C. Laboratory shall furnish Contracting Officer with a certificate stating that it is fully equipped and qualified to perform intended work, is fully acquainted with specification requirements and intended use of materials and is an independent establishment in no way connected with organization of Contractor or with manufacturer or supplier of materials to be tested.
- D. Certificates shall also set forth a list of comparable projects upon which laboratory has performed similar functions during past five years.
- E. Samples and laboratory tests shall be sent directly to approved commercial testing laboratory.

- F. Contractor shall send a copy of transmittal letter to both COR and to Architect-Engineer simultaneously with submission of material to a commercial testing laboratory.
- G. Laboratory test reports shall be sent directly to COR for appropriate action.
- H. Laboratory reports shall list contract specification test requirements and a comparative list of the laboratory test results. When tests show that the material meets specification requirements, the laboratory shall so certify on test report.
- I. Laboratory test reports shall also include a recommendation for approval or disapproval of tested item.
- 4. If submittal samples have been disapproved, resubmit new samples as soon as possible after notification of disapproval. Such new samples shall be marked "Resubmitted Sample" in addition to containing other previously specified information required on label and in transmittal letter.
 - A. Approved samples will be kept on file by the COR at the site until completion of contract, at which time such samples will be delivered to Contractor as Contractor's property. Where noted in technical sections of specifications, approved samples in good condition may be used in their proper locations in contract work. At completion of contract, samples that are not approved will be returned to Contractor only upon request and at Contractor's expense. Such request should be made prior to completion of the contract. Disapproved samples that are not requested for return by Contractor will be discarded after completion of contract.
 - B. Submittal drawings (shop, erection or setting drawings) and schedules, required for work of various trades, shall be checked before submission by technically qualified employees of the General Contractor for accuracy, completeness and compliance with contract requirements. These drawings and schedules shall be stamped and signed by Contractor certifying to such check.
- 5. When work is directly related and involves more than one trade, shop drawings shall be submitted to Architect-Engineer under one cover.
 - A. Samples, shop drawings, test reports, certificates and manufacturers' literature and data, shall be submitted for approval to:

A/E Address and POC AND COR Name, COR Long Beach Healthcare System 5901 East 7th Street Building 5C Long Beach, CA. 90822 B. At the time of transmittal to the Architect-Engineer, the Contractor shall also send a copy of the complete submittal directly to the COR.

- -- E N D ----

REQUEST FOR INFORMATION (RFI)			
PROJECT NUMBER:	600-13-114	RFI NUMBER:	004
PROJECT NAME:	Upgrade Restrooms	DATE REQUESTED:	11/13/2014
SOLICITATION NUMBER:	VA-262-15-B-0044	REFERENCE:	Phasing
DRAWING:		SPECIFICATION SECTION:	N/A
DESCRIPTION OF PROE	BLEM(S) OR INFORM	ATION BEING REQUESTED	
Phasing. Will the Contractor be granted simultaneous access to all areas depicted as part of this project? If not, and phasing is contemplated, please provide the VA phasing plan or narrative, so the Contractors may determine if sufficient time has been allotted to the project.			
PROJECT MANAGER'S RESPONSE			
One bathroom at a time for the individual toilet/shower rooms			
TRACKING NUMBER:		AMENDMEN	۲ NUMBER:
VA PROJECT ENGINEER/M MELEK KULKARNI, (562) 83		DATE: 11-20-	14

REQUEST FOR INFORMATION (RFI)			
PROJECT NUMBER:	600-13-114	RFI NUMBER:	005
PROJECT NAME:	Upgrade Restrooms	DATE REQUESTED:	11/13/2014
SOLICITATION NUMBER:	VA-262-15-B-0044	REFERENCE:	Work Hours
DRAWING:		SPECIFICATION SECTION:	N/A
DESCRIPTION OF PROE	BLEM(S) OR INFORMA	TION BEING REQUESTED	
Work Hours. Will the VA req	uire that any or all of the de	picted work occur after hours or	on the weekend?
	·		
PROJECT MANAGER'S RESPONSE			
Working hours are fro	m 8:00 am to 4:30 p	m. Weekend hours or nig	ghttime hours might be
required depending on the Contractor's task and the hospital service area involved.			
TRACKING NUMBER:		AMENDMEN	T NUMBER:
VA PROJECT ENGINEER/M		DATE: 11-20-	14
MELEK KULKARNI, (562) 8	20-8000, 85099		

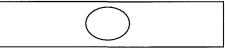
RFI FORM

Contractor Name: Sapper West, Inc. Address: 1927 49th Street, Sacramento, CA 95819 Phone/Fax: (916) 736-2267, (916) 379-9153 Send to: <u>harry.seballos@va.gov</u>

REQUEST FOR INFORMATION (RFI)				
PROJECT NUMBER:	600-13-114	RFI NUMBER:	¥	6-19
PROJECT NAME:	Upgrade Restrooms	DATE REQUESTED:	14	Nov 14
SOLICITATION NUMBER:	VA-262-15-B-0044	REFERENCE:		
DRAWING:		SPECIFICATION SECTION:		
DESCRIPTION OF PROP	BLEM(S) OR INFORMA	ATION BEING REQUESTED		
Please be specific as possil	ole:			
to prevent cutting ir would be harmful a recommended othe Use radar instead of 2. Was there an asbe Yes, Safety has cop	nto exiting electrical condu nd dangerous to individua er than X-ray? Keep in min nuclear stos and lead survey perf pies available.		equire that v metł	e nuclear tests that would be hod.
	3. Will Contractor be allowed to impede corridor for patient rooms 418, 419 & 421 to install temporary wall hard wall? If yes, by how linear feet? No Hard wall barriers will be constructed. Use fire rated plastic with zippers at doors and install tack mats.			
they to include the	4. Contractor requests better clarification of bid instructions. For bid deductive alternates 2, 3 and 4; are they to include the main bid scope and delete each room ONLY as it is stated in paragraph?			
 Clarification provided on page 2 of this RFI. 5. What are the working hours that the Contractor will be allowed to work? Normal hours are 8:00 am to 4:30 It is possible based on construction activity that weekend or night hours could occur. 				
	3. What is the warranty period for this project?			
7. Need manufacture Refer to attached cu	7. Need manufacture and model number of shunt relay. Refer to attached cutsheet 6001a-ul924-sr-cutsheet.			
	8. There's no IC Intercom symbol showing for restrooms on the 8 th and 10 th floors. Please confirm that			
these restrooms include intercom systems and their locations. Nurse call needs to be included.				
	 Will Contractor be required to paint all walls of patient rooms for restrooms on the 8th & 10th floors? Restroom walls neeed to be painted. If the Contractor damages walls in patient room, it will need to be repainted. 			
10. Will patient rooms t <mark>Yes</mark>	be vacant for restrooms o	n floors 8 & 10 during construc	tion?)
	-	C intercom system for restroor	n 41	8 & 419?
12. Contractor request schedule does not	All bathrooms will have nurse call 12. Contractor requests model number and manufacture of shower valve and shower head. Plumbing schedule does not provide this information. Refer to page 49 of Appendix C.			
Relef to page 49 of	Appendix C.			. , .

13. Is there any abatement work in this contract and, if so, what are the specific requirements and quantities? No Abatement work is included. In the event asbestos is discovered, it will be handled by Safety.

14. Need better clarification on lighting schedule. The following symbol is not shown in schedule.



Refer to sheet E-1. This symbol is shown on the lighting symbol list.

#4, Clarification on Bid: The <u>Main Bid</u> is for construction services to renovate private showers and toilet rooms for various floors in Bldg 126; <u>Main Bid is inclusive for all work described in SOW</u>.

- <u>Deductive Bid Alternate 1</u> is for all work in the Main Bid "<u>except</u>" the Contractor shall '<u>DELETE</u>" Toilet Room W812 from SOW.

- <u>Deductive Bid Alternate 2</u> is to "<u>DELETE</u>" Toilet Room W421 to include W812 from SOW.

- Deductive Bid Alternate 3 is to "DELETE" Toilet Room W418 to include W421 and W812 from SOW.

The Bid Alternates are progressively deductive; in other words, as estimators progress through the deducts, the cost may decrease as Toilet Room(s) are removed.

CONTRACTORS ARE REMINDED TO RE-READ PAGE 8, ITEM 10. BID/COST SCHEDULE.

PROJECT MANAGER'S RESPONSE

TRACKING NUMBER:	AMENDMENT NUMBER:
VA PROJECT ENGINEER/MANAGER: MELEK KULKARNI, (562) 826-8000, x5099	DATE:

UL924 Enclosed 20 AMP Bypass Shunt Relay

EMERGENCY LIGHTING BYPASS CONTROLS





UL924SR

PROJECT INFORMATION

Project Name

Catalog No.

Date

Hubbell Building Automation's enclosed 20 Amp electrically held UL 924 Bypass Shunt Relays provide an isolated normally closed contact that can be used to provide bypass shunt to power emergency egress lighting directly from the emergency generator source. The coil in these relays is powered by a normal power supply.

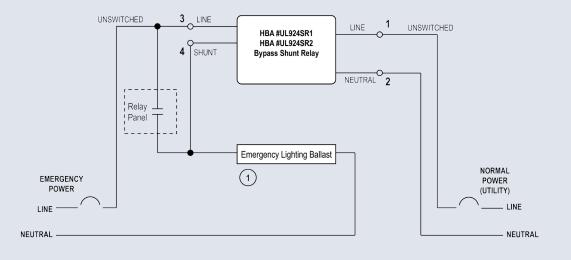
When the loss of commercial power occurs, the contact returns to its normally closed state and bypasses control to the emergency egress lighting. These fixtures will remain connected directly to generator emergency source until transfer back to normal power occurs.

PRODUCT FEATURES

- 20 Amp 120/277VAC Relay
- N/C isolated contacts
- UL listed
- No minimum load requirement
- Five-year limited warranty







(1) Switched by Panel when Normal Power is available. Held ON when Normal Power is not available and Emergency Power is available

General Specifications

# Relays & Contact Type	One (1) SPST Continuous Duty Electrically Held Coil
Contact Ratings	1500 VA Tungsten @ 120VAC 20 Amp Ballast @ 120/277VAC 2 HP @ 277VAC 1 HP @ 120VAC
Coil Current	0.06 A @ 120VAC 0.06 A @ 277VAC
Coil Voltage Input	UL924SR1: 120VAC; 60Hz UL924SR2: 277VAC; 60Hz
Operating environment	Indoor use only 32° to 140°F Relative humidity (non-condensing): 0% to 95%
Dimensions	3.75" x 1.75" x 1.25" with mounting ears for 1-gang box
Housing Rating	Plenum, NEMA 1
Flame Rating	UL94V-0
Wires	7", 105° C, 600V Rated
Certifications	UL Listed, UL924
Warranty	Five-year limited

Ordering Information

