Part 1 - GENERAL

* 1. RELATED DOCUMENTS

# *UTEK* Pit Liner System Section-



* + 1. Drawings and general provisions of Contract, including General and Supplemental Conditions and Division 1 Specification sections apply to work of this section.

## WORK INCLUDED

* + 1. Provide materials, labor and equipment required to prepare designated floor area and install flooring as shown on the drawings.
		2. Related Work:
			1. Section 03300: Concrete Work, for concrete substrate.
			2. Section : Plumbing, drains.
			3. Section 07000: Sealants, silicone sanitary and USDA sealants.

## QUALITY ASSURANCE

* + 1. Manufacturer: Obtain all flooring materials required for this Section from a single source.
		2. Contractor: Shall have a minimum of 5 years experience in the installation of seamless flooring and be approved in writing by the specified manufacturer.

## SUBMITTALS

* + 1. Related MSDS
		2. Manufacturer's standard single source warranty in accordance with Section 1.06 WARRANTY.

## WARRANTY

Furnish manufacturer's written warranty on seamless flooring for period of two years after installation, as part of the complete system.

## DELIVERY, HANDLING AND STORAGE

* + 1. Deliver materials in manufacturer's undamaged containers, clearly marked with the following:
			1. Product Name
			2. Manufacturer's Name
			3. Resin or Hardener Designation
			4. Mix Ratio of Resin and Hardener
		2. Handle materials in a safe and proper manner to avoid damage or spill.
		3. Inspect direct jobsite deliveries to verify correct material and quantities are received in good condition.
		4. Replace, at no cost to the owner, materials that are found to be defective in manufacturing or damaged in transit, handling or storage.
		5. Store materials per manufacturer's instructions and as follows.
			1. Seals and labels shall be intact and legible.
			2. Temperature of storage area shall be maintained between 40oF and 80F.
			3. Do not use materials which have been stored for a longer period of time than the manufacturer's maximum recommended shelf life.

## JOB SITE CONDITIONS

* + 1. Pre-Installation conference shall be required with General Contractor, Owners Representative, Flooring Contractor and/or Manufacturer's Representative to review the following:
			1. Evaluate slab conditions and extent of repairs necessary for Contractor to begin normal preparation and installation of seamless flooring.
			2. Evaluate detail conditions at all penetrations, terminations, perimeter and drain locations. Detail problems shall be documented and resolved prior to floor installation..
			3. Review job site conditions, including temperature, power, and lighting. Such problems shall be documented and resolved prior to floor installation.
		2. Protect surrounding substrate and surfaces as well as in place equipment from damage during surface preparation and system installation.
		3. All drains must be working and set at the proper elevation (1/4” anobe slab).
		4. General Contractor shall provide adequate ventilation by use of fans or other devices.
		5. General Contractor shall maintain lighting at final end use levels during the installation.
		6. General contractor shall ensure that leaks from pipes and other sources are corrected prior to floor installation.
		7. General Contractor shall provide minimum substrate and ambient temperature of 60F and relative humidity below 80% during floor installation and until final acceptance.

## CURING, CLEAN UP AND PROTECTION

* + 1. Cure final floor system in accordance with manufacturer's recommendations.
		2. Clean up work area, removing all equipment, materials and trash.

General contractor shall provide temporary protection from construction traffic and other trades prior to final acceptance by the owner.

Part 2 - PRODUCTS

* 1. Materials
		1. Systems Overview

System Basis-of-Design: U-tek pit kiner system by LSP is the basis of design. The system shall consist of high density urethane cement for both the pit floors and walls. The sloping is required the system shall be applied at a minimum slope rate of 1/8” per foot fall per linear foot of run to the drain. The 1/8” slope shall be calculated from the drain to the farthest corner of the pit. The system shall be sealed with urerthane cement sealer designed for the system.

* + 1. The system shall have the following properties:
			- Compressive Strength: 5600psi
			- Tensile Strength: 750 psi
			- Impact resistance: No impression @ 160 ft lb
			- Water Absorption: <0.1%
			- Abrasion Resistance: 20 – 30 mg. loss
				* CS-17 wheel, 1000 cycles
			- Adhesion: Concrete failure
			- Coefficient of friction: Meets or exceeds ADA
			- Application Temp: 45 -85 degrees F, 77 %
			- Cure time:
			- Foot traffics 8 hours
			- Service 16 hours
			- Service Temperature: -40F to 250F

C The system shall be sealed with Urethane Cement seal coat as recommended by manufacturer for the application.

C. Drains shall be set 1/4” above the substrtate to allow for minimum build of ¼” for the system.

Part 3 - EXECUTION

* 1. Surface Preparation
		1. Prepare concrete to “open” surface pores by means of mechanical grinding, removing contaminants and bond breaking substances, including but not limited to dust, latencies, curing compounds, coatings, sealers, oil and grease. Mechanically remove delaminated or deteriorated concrete by scabbing or chipping hammers. Areas to be patched shall be saw cut to minimum 1/2” depth at perimeters and keyed to existing concrete. If a coating exists, remove it to expose bare concrete.

## CLEANING AND PROTECTION

* + 1. Cleaning: Remove all debris resulting from the flooring installation during the progress of the work.
		2. Protection: General contractor shall provide protection from other trades prior to final acceptance by owner.