

Ouray Silver Mines, Inc.  
1900 Main St. Unit 1  
PO Box 564  
Ouray, CO 81427



November 18th, 2021

Colorado Division of Reclamation Mining and Safety  
1313 Sherman Street, Rm 215  
Denver, CO 80203

**RECEIVED**

NOV 22 2021

**DIVISION OF RECLAMATION  
MINING AND SAFETY**

**Subject: Technical Revision 14 (TR-14) Memo: Change Floor Sealant  
DRMS Permit No. M-2012-032  
Revenue Mine, Ouray County, Colorado**

Dear Mr. West,

Ouray Silver Mines, Inc. (OSMI) is formally requesting to use VerdeFloor SLX2 as an alternative to Fastop SL23. The alternative concrete sealant, which is resistant to chemicals and is expected to provide a suitable seal to the concrete floor, is being procured. As was specified in TR-14, the condition of the sealant on the concrete floor will be inspected on a regular basis and new sealant will be applied when necessary. Please see the attached technical data sheet for the replacement sealant along with email correspondence with the manufacturer stating that VerdeFloor SLX2 is compatible with the reagent chemicals that are used in the mill without the need for additional chemical resistant sealant.

Our contractor will continue with equipment placement and the concrete sealant will be applied once it arrives. Areas where the sealant cannot be applied, such as underneath tanks, will be sealed using a caulk that has been approved by the Division.

OSMI appreciates your attention to this matter. If you have any questions, please contact me at (970) 325-9830.

Sincerely,

Poppy Staub  
VP Environment & Government Affairs  
Ouray Silver Mine Inc

Cc: Travis Marshall, DRMS  
Amy Yeldell, DRMS  
Brian Briggs, OSMI

## RE: Fast Top Flooring equivalent



David Keller <davidK@verdia.com>

To: Todd Jesse; Karl Baum

Cc: Poppy Staub; Michelle Robbins; Ashlee Briggs

Todd,

Thank you for the chemical exposure for your upcoming project. I do not see an issue with any of the chemicals listed. Of course, appropriate house keeping and washdowns help any chemical from evaporating and increasing in concentration.

We have stock in Denver with our distributor who can provide further service.

Moving forward, can you help me with the following?

Size in sqft of project?

Timing of project?

Who will be preparing concrete and installing the Verdia system?

David Keller  
Verdia Flooring  
11133 I-45 South Ste i  
Conroe TX 29672  
Cell:317-417-2829  
Office: 713-999-5090

**From:** Todd Jesse <[tjesse@ouraysilvermines.com](mailto:tjesse@ouraysilvermines.com)>

**Sent:** Wednesday, November 17, 2021 4:53 PM

**To:** Karl Baum <[kbaum@ouraysilvermines.com](mailto:kbaum@ouraysilvermines.com)>; David Keller <[davidK@verdia.com](mailto:davidK@verdia.com)>

**Cc:** Poppy Staub <[pstaub@ouraysilvermines.com](mailto:pstaub@ouraysilvermines.com)>; Michelle Robbins

<[mrobbins@ouraysilvermines.com](mailto:mrobbins@ouraysilvermines.com)>; Ashlee Briggs <[abriggs@ouraysilvermines.com](mailto:abriggs@ouraysilvermines.com)>

**Subject:** RE: Fast Top Flooring equivalent

[External Email: Please do not click links or open attachments unless you trust the sender and know the content is safe. If in doubt, contact the IT Help Desk.]

David,

Attached is a table with all of our reagent chemicals. I also attached the sds sheets for them. Let me know if you have any questions.

Thanks,  
Todd

**From:** Karl Baum <[kbaum@ouraysilvermines.com](mailto:kbaum@ouraysilvermines.com)>  
**Sent:** Wednesday, November 17, 2021 1:20 PM  
**To:** Todd Jesse <[tjesse@ouraysilvermines.com](mailto:tjesse@ouraysilvermines.com)>; [davidk@verdia.com](mailto:davidk@verdia.com)  
**Cc:** Poppy Staub <[pstaub@ouraysilvermines.com](mailto:pstaub@ouraysilvermines.com)>; Michelle Robbins  
<[mrobbins@ouraysilvermines.com](mailto:mrobbins@ouraysilvermines.com)>; Ashlee Briggs <[abriggs@ouraysilvermines.com](mailto:abriggs@ouraysilvermines.com)>  
**Subject:** FW: Fast Top Flooring equivalent

David,

This sounds like music. I've cc'd those smarter than I on our regulatory requirements.

Mr. Todd Jesse will be reaching out to you now.

Respectfully,

Karl  
949.244.1378

**From:** David Keller <[davidK@verdia.com](mailto:davidK@verdia.com)>  
**Sent:** Wednesday, November 17, 2021 1:09 PM  
**To:** Karl Baum <[kbaum@ouraysilvermines.com](mailto:kbaum@ouraysilvermines.com)>  
**Subject:** Fast Top Flooring equivalent

Hello Karl,

I received your inquiry about a need for a flooring product equivalent to Fasttop SL23. Our VerdeFloor SLX2 is an equal to this product and is available if your current product is not available.

Please let me know how I can help with your current and future projects.

Thank you and I look forward to working with you.

David Keller  
Verdia Flooring  
11133 I-45 South Ste i  
Conroe TX 29672  
Cell:317-417-2829  
Office: 713-999-5090



# VerdeFloor SLX2

Self-Leveling Slurry Polyurethane Concrete

## TECHNOLOGY DESCRIPTION

Verdia flooring represents the next generation of industrial and commercial flooring technology. Verdia provides user friendly products with minimal environmental impact. Many of our high performance components are USDA certified as a biobased product and available in environmentally friendly packaging to reduce nonrecyclable waste.

## PRODUCT DESCRIPTION

VerdeFloor SLX2 is a Medium-Duty seamless flooring system typically installed at 3/16" finished thickness. VerdeFloor SLX2 is resistant to MVT and withstands moderate thermal shock, impact, abrasion and chemical exposures. VerdeFloor SLX2 offers various surface profiles to meet individual project requirements. VerdeFloor SLX2 is formulated with a natural additive to be resistant to Fungi Growth per the industry standard ASTM G-21.

## TYPICAL PROPERTIES AT 70°F

Compressive Strength (ASTM C-579)	8,400 psi
Tensile Strength (ASTM C-307)	1,050 psi
Flexural Strength (ASTM C - 580)	2,700 psi
Bond Strength (ASTM D - 4541)	100% Concrete Failure
Impact Strength, in / lb s (ASTM D - 4226)	>160 in-lb.
VOC Content	5 gm/l
Resistance to Fungi Growth (ASTM G-21)	Passes, Rating of 1

*The data shown above reflects typical results based on laboratory testing under controlled conditions. Variations from the data shown may result. Test methods are modified where applicable.*

## INSTALLATION DATA

Application Temperature, ambient	40-85°F
Application Temperature, material	50-80°F
Shelf Life	6 months
Pot Life, @ 77°F	15 minutes
Traffic, @ 77°F	Light: 12 hours / Full: 24 hours
Fully Cured, @ 77°F	7 days

*Refer to VerdeFloor Application Guide for additional installation information*

## IMPORTANT INFORMATION

1. VerdeFloor is not color stable unless UV resistant topcoat is used.
2. VerdeFloor flooring should not be installed on wet concrete.
3. Floors should be sloped to drain to prevent standing water or chemicals.
4. Spills should be removed as soon as possible to prevent a slipping hazard.
5. Confirm product performance in specific chemical environment prior to use.
6. Prepare substrate according to "Surface Preparation" portion of this document.
7. Follow detailed instructions in the "VerdeFloor Application Guide"
8. Always use protective clothing consistent with OSHA regulations during use.
9. Refer to Safety Data Sheet for detailed safety precautions.
10. For industrial/commercial use. Installation by trained personnel only.

## TECHNICAL DATA SHEET

## BENEFITS

- Seamless, hygienic finish; no grout joints
- Impact & abrasion resistant surface
- Low odor, fast installation, fast cure
- Thermal shock & chemical resistant
- High temperature resistant 180 F\*  
\*varies with different topcoat options, see below
- Anti-slip surface, meets ADA recommendations
- Resistant to moisture vapor transmission (MVT)
- Resistant to fungi growth per ASTM G-21

## RECOMMENDED USES

- Commercial kitchens
- Restrooms and locker rooms
- Supermarkets and food prep areas
- Food & beverage facilities
- Laboratories

## GENERIC DESCRIPTION

Polyurethane Concrete

## TYPICAL APPLICATION

3/16" Slurry applied broadcasted and top coated

## OPTIONAL TOPCOATS

VerdeCoat HPE - High Performance Epoxy  
VerdeCoat CRE - Chemical Resistant Epoxy  
VerdeSeal RCU - Rapid Cure UV Resistant Polyurethane  
VerdeFloor TC - Polyurethane Concrete Coating  
VerdeFloor UV - UV Resistant PU Concrete Coating  
VerdeSeal SBA - Solvent Based Polyaspartic

## AVAILABLE COLORS

See Verdia Color Chart for Available Colors

## PACKAGING AND COVERAGE

Part A and B liquids are packaged in

5 gallon pails and 250 gallon totes

### Double Unit Mix:

1 gallon Part A, 1 gallon Part B, 1 SLX2 Filler Bag

1 Powder Pigment

50 sqft/unit @1/8" for a 3/16" finished floor

## SURFACE PREPARATION

**Concrete:** Apply only to properly prepared clean, dry and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants.

- *New concrete should ideally be cured for a minimum of 14 days to reduce possible shrinkage cracking in the concrete. VerdeFloor can be installed after 7 days or when concrete reaches a minimum 3,500 psi compressive strength which will allow for proper surface preparation, however, early curing movement, shrinkage or cracking that may occur in the concrete will be reflected through the final VerdeFloor flooring.*
- *Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed.*
- *Remove any laitance or weak surface layers including broom finish surface.*
- *Concrete should have a minimum surface tensile strength of at least 300 PSI per ASTM D-4541.*
- *Surface profile shall be CSP-3-5 or meeting ICRI (International Concrete Repair Institute) standard guideline #03732 for coating concrete, producing a profile equal to 40-grit sandpaper or coarser. Prepare surface by mechanical means to achieve this desired profile.*
- *Moisture vapor transmission should be 12 pounds or less per 1,000 square feet over a 24-hour time period, as confirmed through a calcium chloride test, as per ASTM E-1907.*
- *All concrete surface irregularities, cracks, expansion joints, control joints and terminations should be properly addressed and prepared prior to application of the flooring. Moving joints and cracks will reflect through the final installed VerdeFloor flooring.*

**Refer to “VerdeFloor Application Guide” for more details.**

## INSTALLATION STEPS

**IMPORTANT** – Follow the detailed application instructions in the “VerdeFloor Application Guide” and the safety instructions listed on the product Safety Data Sheets (SDS) copies available upon request. The following installation summary is for reference only and should not be relied upon as all inclusive. VerdeFloor systems should only be installed by trained persons experienced in polyurethane concrete flooring applications.

1. To prevent lifting or delamination, keyways (minimum 5/16" wide x 5/16" deep) must be cut at all terminations, joints, columns, doorways, and drains. See VerdeFloor construction detail drawings.
2. Clean sand and dust from prepared concrete where the floor is to be installed.
3. Option: Use VerdeFloor CB Cove Base material to install a cove and/or base as required. The cove/base can be installed before or after the installation of the VerdeFloor SL depending on the specification and or the desired result. The VerdeFloor CB can be used to create a simple cant cove as well.
4. Pour 1 Gallon Part A into a 5-gallon mixing pail.
5. Add 1 Powder Pigment to Part A and mix about 15 seconds using a ½" drill and jiffy-type mixing paddle.
6. Add 1 Gallon Part B and mix another 15 seconds.
7. Gradually add all contents of a VerdeFloor SLX2 Filler into the liquid mixture and blend thoroughly until all particles are wetted out, normally about two minutes. **DO NOT BLEND AGGRESSIVELY OR INTRODUCE AIR.**
8. Immediately after mixing (within 3 minutes), spread the mixed VerdeFloor SLX2 onto the floor at the desired thickness, using a cam rake or trowel. Approximately 1/8" for a 3/16" finished floor.
9. Lay abutting edges within 10 minutes to ensure a clean edge. A “wet edge” installation is imperative during large placements to avoid lines and ridges in the finished floor.
10. Evenly apply to desired thickness while trying to keep cam rake lines to a minimum. Backroll across slurry with spike roller to help settle aggregates and blend cam rake lines.
11. Broadcast to rejection specified broadcast media (aggregate or decorative flakes) onto the wet slurry. Do not broadcast onto the wet edge area until settling and backrolling is complete. Continue broadcasting until no wet areas remain.
12. After curing (approximately 6-8 hours to withstand foot traffic), remove all excess broadcast media and scrape floor as required.
13. Apply specified topcoat to lock system and achieve desired slip resistance.

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Rev 4/20

Verdia warrants its products to be free from defects in material and workmanship. Verdia's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Verdia's option, to either replacement of products not conforming to this warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to Verdia in writing within five days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify Verdia of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

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