

**1. PRODUCT NAME**

**MirrorCrete**<sup>®</sup>

**2. MANUFACTURER**

Floor Seal Technology, Inc.  
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Milpitas, CA 95035  
(800) 572-2344  
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**3. USE**

MirrorCrete is a sustainable, long term mirror like polished concrete floor finish for new floors and decks. The process is also very effective on existing slabs that have previously polished, previously covered with a traditional floor finish and to rehabilitation previously polished floors.

**4. COMPONENTS**

MirrorCrete is systematic process of cutting the concrete surface, increasing abrasion and impact resistance and polishing to the desired high light reflectivity, mirror like finish.

**Natural Polished Concrete Finish**

**MirrorCure** | Special concrete curing technology  
**MirrorCrete** | Proprietary lithium silicate hardener, densifier

**Optional Components**

**MirrorDye** | Concrete colorant for polish compatibility,  
**MirrorSeal** | Water, stain and chemical protectant  
**MirrorClean** | Specialty polished floor cleaner

**5. QUALITY CONTROL OPTIONS**

**NEW CONSTRUCTION** | Floor Seal Technology provides pre-construction sampling, designing and estimating and full factory construction services to achieve the specified polished floor finish requirements.

**EXISTING CONCRETE** | Floor Seal Technology offers pre-construction services to determine concrete compatibility, estimates, floor designs and special requirements to pre-existing conditions.

**6. POLISHED FLOOR FINISH SAMPLES**

Five (5) standard aggregate finishes are available for review upon request. Upon selection, optional coloring, desired

gloss, chemical and stain protection may be determined.  
**Site Mock-Up:** An on site mock up panel is recommended and mandatory to assist in the final selection process. This will provide the specific properties of the concrete for achieving the desired polished floor results.

**7. NEW CONSTRUCTION SERVICES**

To achieve exceptionally polished concrete floors, Floor Seal Technology offers pre-construction design, specifications, concrete compatibility, estimating and scheduling requirements.

Construction services include the on site quality control inspections, trade coordination meetings, concrete compatibility, weather monitoring, floor flatness requirements, floor protection protocols and MirrorCure curing technology by factory employed personnel. The services are designed to reduce concrete cracking, surface deficiencies and abnormal irregularities of the concrete to be polished.

Polished concrete floors are a sustainable investment and permanent finish. Floor protection is critical and storage of plastic, metal, oil leaks and other contaminants on the concrete surface will result in permanent damage and irreversible stains.

**8. DIAMOND FLOOR PREPERATION**

All concrete requires mechanical preparation to expose the selected aggregate finish, using metal bonded diamonds. To achieve the selected aggregate finish (finish samples) and a series of metal bonded diamond (50 to 200 grit) are used to cut the floor surface and expose the desired amount of aggregate for the intended floor design.

To prevent floor scratching, the floors are cleaned and vacuumed after each diamond grit process.

The preparation process will expose the concrete flatness deficiencies, joint curling, abnormal cracking, shrinkage cracks and surface irregularities that will need to be observed and determined in the final floor design.

**Note:** A newly poured concrete floor often shows the signs floor flatness limitations and finishing deficiencies during the preparation process. To the deficiencies, Floor Seal Technology highly recommends its pre-construction and construction services to achieve the ideal concrete properties for floor polishing.

### 9. COLORING APPLICATION (OPTIONAL)

Floors may be color dyed in a single or multi coat process to achieve the required coloring, after the diamond floor preparation process using MirrorDye colorants or an approved colorant of choice. Some colorants may also be added to the MirrorCrete product for use during the burnishing process.

### 10. MIRRORCRETE INSTALLATION

Following the diamond preparation process and coloring application, MirrorCrete is applied as a hardener and densifier. The proprietary lithium silicate technology is applied in a single or multi-coat application process to saturate the concrete surface by factory-employed personnel, followed by burnishing into the concrete with a factory approved polishing machine.

### 11. FINISHING PROCESS

MirrorCrete surface is then burnished using resin diamond pads to achieve the specified mirror like finish. The resin diamond options range from 200 to 3,000. The higher the resin polishing level the higher the light reflectance and mirror like finish.

### 12. SEALER/ PROTECTANT (OPTIONAL)

Improved chemical, water and stain resistance may be achieved, when MirrorSeal protectant is applied by factory-employed personnel.

### 13. FLOOR PROTECTION

Protect floors from trade traffic and allow floors to cure based on temperature and humidity requirements. Consult manufacturers employed personnel for approved breathable painters cloths, floor protection and taping materials. Never use duct tape or adhesives directly to newly polished floors. Sand, rocks and debris to be must be removed daily to prevent damage to the installed finish.

### 14. MAINTENANCE

Floors may be cleaned daily or weekly by microfiber sweeping or mop cleaning to remove sand, rocks, dust and debris from the polished floor surface. A Tennant type floor scrubber machine may also be used with the MirrorClean neutral cleaner to maintain a long lasting floor shine. The use of citrus or solvent-based cleansers, will dull the finish, diminish light reflectance and reduce the mirror like floor finish.

### 15. AVAILABILITY

The products and process are available throughout the USA.

### 16. WARRANTY

The finish is factory warranted for material defects and installation workmanship for a period of 10 years. Please refer to actual warranty for terms and conditions.

### 17. LEED® CONTRIBUTIONS

The intent of the US Green Building Council's Leadership in Energy and Environmental Design (LEED®) program is to provide design guidelines and a third-party certification tool for sustainable building practices. Products are not certified under the LEED program. However, use of MirrorCrete Polished Concrete System on your project may contribute towards the following credits:

#### MR 1.1/1.2/1.3 – Building Reuse

**Intent** - Extend the life cycle of existing building stock, conserve and retain cultural resources, reduce waste, and reduce environmental impact with regards to manufacturing materials and their transport

**Requirement** – Reuse existing building structure. The MirrorCrete Polished Concrete System beautifies and improves the existing concrete slab. This reuse of the concrete slab eliminates the need for new floor covering materials and VOC-containing adhesives.

#### EQ 4.2 – Low Emitting Materials, Paints & Coatings:

**Intent** - Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installers and occupants.

**Requirements** – Comply with South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004. MirrorCrete components are low (<50g/L) in VOC content to meet requirements.

**EAc1 – Optimize Energy Performance Intent** - Reduce environmental and economic impacts associated with building energy usage.

**Requirements** – Two methods of achieving this credit include: reduce demand for energy and improve efficiency of HVAC, lighting, and building envelope. Improvements are measured against a baseline set by ASHRAE / IESNA 90.1 – 2004. Additional credits are earned for each 3.5% marginal gain over the baseline.

MirrorCrete increases the density, sheen and light reflectivity of existing concrete floors. The increased reflectivity reduces the lighting demand. Additionally, the thermal mass of a polished floor assists in retaining the temperature of the building envelope, thereby reducing the energy required by the building's HVAC system.