Surface coated concrete does not conform to the definition of polished concrete per the CPC. It is the operation of applying a film forming coating to a concrete floor surface to achieve a specified level of finished gloss.

**Application:** It is the operation of applying a film forming coating to a concrete floor surface to achieve a specified level of finished gloss. Durability depends on the quality of the chemical coating used, the amount of traffic across the floor, and floor maintenance.

- Slip Resistance: Dynamic Coefficient of Friction (DCOF) range of 0.35 to 0.45 under wet conditions when measured according to ANSI B101.3.
- Surface Profile: Range to be determined.

**Film Forming Coating** - a film forming material which is designed to be a surface coating on concrete with a minimal film thickness of greater than 0.05 mils. which meets the OSHA requirements for slip resistance as tested by ASTM D2047 and stain resistance of ASTM D1308.

- Typical Film Formers
  - Wax
  - Acrylics
  - Epoxy
  - Urethane
  - Polyaspartic
  - Methyl Methacrylates
  - or other film formers compatible with concrete

**Definition of Sealer from ASTM D16** – a liquid composition to prevent excessive absorption of finishing coats into porous surfaces; also a composition to prevent bleeding.

1. **Sealer-Semi Impregnating Stain Protection** – a film forming material which will penetrate into the polished and densified concrete leaving a protective surface film of less than 0.5mils which meets the OSHA requirements for slip resistance as tested by ASTM D 2047\(^1\) and Stain resistance of ASTM D 1308\(^2\).

2. **Sealer-Impregnating Stain Protection:** Non film forming stain and food resistant penetrating sealer designed to be applied to densified and polished concrete. Material must meet the requirements of OSHA for slip resistance as tested by ASTM D 2047\(^1\) and Stain resistance of ASTM D 1308\(^2\).

**Notes**

Finished Gloss - Processing a concrete floor surface to achieve a specified level of finished gloss; (flat [ground], satin [honied], semi polished, and highly polished) that is measure in reflective clarity (DOI), and reflective sheen (specular gloss), and haze. Glossy finishes are classified as levels 1,2,3 and 4 with varying degrees of reflective clarity and sheen. (see Finished Gloss Chart)

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>NAME</th>
<th>REFLECTIVE CLARITY</th>
<th>REFLECTIVE SHEEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flat [Ground]</td>
<td>Flat appearance with no to very slight diffused reflection</td>
<td>10 None to very low</td>
</tr>
<tr>
<td>2</td>
<td>Satin [Honied]</td>
<td>Matte appearance with or without slight diffused reflection</td>
<td>Low to medium</td>
</tr>
<tr>
<td>3</td>
<td>Semi-Polished</td>
<td>Objects being reflected are not quite sharp and crisp but can be easily identified</td>
<td>to Medium to high</td>
</tr>
<tr>
<td>4</td>
<td>Highly-Polished</td>
<td>Objects being reflected are sharp and crisp as would be seen in a mirror-like reflection</td>
<td>100 High to highest 80</td>
</tr>
</tbody>
</table>

- Reflective Clarity:
  - Visual Appearance: When viewed 5 feet above and perpendicular to a surface, the degree of sharpness and crispness of the reflection of overhead objects.
  - Measurement by Device: Numbers indicate the Distinctness of Image on a scale of 1 (poor) to 100 (high) when measured according to ASTM D5767.

- Reflective Sheen:
  - Visual Appearance: When viewed at 20 feet from and at an angle to a surface, the degree of gloss reflected from a surface.
  - Measurement by Device: Numbers indicate the Gloss at 60 degrees when measured according to ASTM D523-08.

- Haze:
  - Measurement by Device: Numbers indicate the variation of gloss between 20 degrees and 60 degrees, when gloss exceeds 70GU, when measured according to ASTM D4039.

- Surface Profile:
  - Measurement by Device: Numbers indicate the variation of peaks and valleys of the concrete surface by using metrology devices.

- Abrasion Resistance:
  - Measurement by Device: Numbers indicate the minimum acceptable revolutions of abrasion.