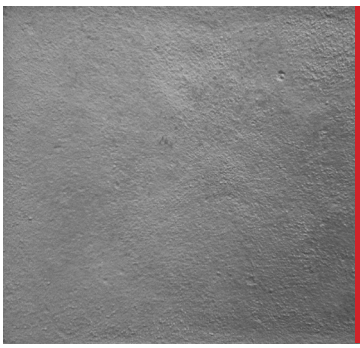
Concrete Surface Preparation Guide

Use this guide to identify the surface profile of your concrete. CSP 1 being the indicator for a nearly smooth floor and CSP 10 indicative of an extremely rough floor. The range of variation will depend on strength, composition, aggregate and finish. CSP 1-4 not recommended with cement based products.

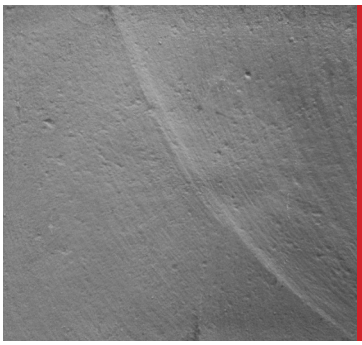


CSP 1

Ideal Applications
- Sealers 0-3 mils

Desired Finish Profile: 27 mils
- Wire brush
- Acid etch

Methods
Tennant scrubber with wire heads or chemical stripper



CSP 2

Ideal Applications
- Sealers 0-3 mils
- Thin films 4-10 mils

Desired Finish Profile: 32 mils
- Diamond grind

Methods
Grinder with 30 grit metal-bond tooling

CSP 3

Ideal Applications
- Thin films 4-10 mils
- High-build coatings 10-40 mils

Desired Finish Profile: 38 mils
- Fine erase
- Diamond shave
- Light blast

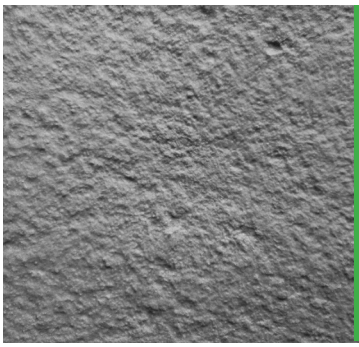
Methods
Grinder with PCDs or shot blaster

CSP 4

Ideal Applications
- High-build coatings 10-40 mils
- Self-leveling toppins 50 mils - 1/8"

Desired Finish Profile: 50 mils
- Med erase
- Very fine strip/scrape
- Light/med blast

Methods
Floor grinder with bush hammers, shot blaster or scarifier



CSP 5
Min. Recommended Surface Prep

Ideal Applications
- High-build coatings 10-40 mils
- Self leveling toppings 50 mils - 1/8"
- Polymer overlays 1/8" - 1/4"
- Concrete overlays & repair materials 1/4" +

Desired Finish Profile: 66 mils
- Coarse erase
- Fine scarify
- Med blast
- Fine strip/scrape

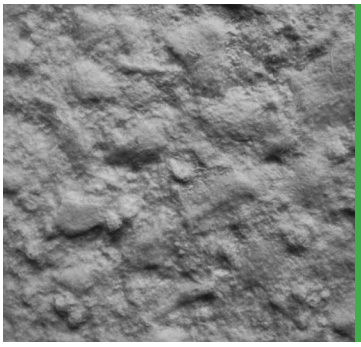
Methods
Floor grinder with bush hammers, shot blaster or scarifier

CSP 6

Ideal Applications
- Self-leveling toppings 50 mils - 1/8"
- Polymer overlays 1/8" - 1/4"
- Concrete overlays & repair materials 1/4" +

Desired Finish Profile: 125 mils
- Med scarify
- Med-heavy blast
- Med strip/scrape

Methods
Shot blaster or scarifier



CSP 7

Ideal Applications
- Polymer overlays 1/8" - 1/4"
- Concrete overlays & repair materials 1/4" +

Desired Finish Profile: 175 mils
- Med-coarse scarify
- Med-heavy blast
- Med-coarse strip/scrape

Methods
Shot blaster or scarifier

CSP 8

Ideal Applications
- Polymer overlays 1/8" - 1/4"

Desired Finish Profile: 210 mils
- Coarse scarify
- Coarse scabble
- Fine plane

Methods
Scarifier or scabbler

CSP 9

Ideal Applications
- Polymer overlays 1/8" - 1/4"

Desired Finish Profile: 214 mils
- Very coarse scarify
- Medium plane

Methods
Scarifier

CSP 10

Ideal Applications
- Concrete overlays and repair materials 1/4" +

Desired Finish Profile: >250 mils
- Coarse plane

Methods
Scarifier